DOCUMENT RESUME

ED 325 290 RC 017 869

AUTHOR Findley, Jean, Ed.; Tonsmeire, J. Kelly, Ed.
TITLE The Wisdom of Practice. Adapting Curriculum To Meet the Needs of Rural Students.
INSTITUTION Alaska Staff Development Network, Juneau.; Alaska State Dept. of Education, Juneau.; Alaska Univ.-Southeast, Juneau.; Sheldon Jackson Coll., Sitka, Alaska.
SPONS AGENCY Fred Meyer Charitable Trust, Portland, OR.
PUB DATE Apr 89
NOTE 84p.; For volume 2 of this publication, see RC 017 868.
PUB TYPE Collected Works - General (020) -- Reports - Descriptive (141) -- Guides - Classroom Use - Guides (For Teachers) (052)

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS *Alaska Natives; American Indian Education; Classroom Techniques; *Curriculum Development; Elementary Secondary Education; Rural Education; *Rural Schools; *Small Schools; *Teacher Effectiveness; Teaching Experience; Teaching Methods
IDENTIFIERS Alaska

ABSTRACT

In this collection, eight master teachers with extensive experience in small, rural Alaska schools describe some of the ways they have adapted instruction to rural Alaskan circumstances. These papers discuss: (1) the characteristics of effective rural teachers; (2) adapting the "Coping!" curriculum for affective education to the cultural background and needs of Native Alaskan students; (3) organization and management techniques for the multigraded, multi-subject classroom; (4) using class book report projects in the upper elementary grades to increase vocabulary, create an interest in reading, and correlate with social studies instruction; (5) involving primary students in the mainstreaming of disabled classmates; (6) incorporating Alaska Native games into the physical education curriculum; and (7) using the Mortensen Math program and its manipulative kits to teach multiplication, algebra, and other areas of mathematics to Alaska Native students. Student art, other graphics, and test instruments related to the discussion are included. (SV)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Alaska DOE
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED325290

RC017869

THE WISDOM OF PRACTICE

ADAPTING CURRICULUM TO MEET THE NEEDS OF RURAL STUDENTS

Edited by:

Jean Findley
J. Kelly Tonsmeire
ALASKA STAFF DEVELOPMENT NETWORK

THE WISDOM OF PRACTICE

ADAPTING CURRICULUM TO MEET THE
NEEDS OF RURAL STUDENTS

THE WISDOM OF PRACTICE

ADAPTING CURRICULUM TO MEET THE NEEDS OF RURAL STUDENTS

Edited by:

Jean Findley
J. Kelly Tonsmeire

Table of Contents

Foreword

J. Kelly Tonsmeire iiv

Introduction

Jean Findley ix

Meeting the Challenge

Bill Radkte 1

Coping!

Lori Carrell 5

But How Do I Teach All Those Grade Levels and Subjects?

Lance C. Blackwood 17

A Novel Approach

Mary Olsen 31

Respect and the Rural School

Annie Keep-Barnes 43

Native Games in Physical Education

Valerie J. Bjornstad 49

Using Manipulatives to Teach Math in a Village School

Helen Eckelman 67

Artists' Credits

..... 79

Foreword

It is with great pleasure that we present this compilation of writing by rural Alaskan teachers. The articles contained in this publication were written by master teachers who are part of the Alaska Staff Development Network's Rural Alaska Mentor Teacher Program. The Rural Alaska Mentor Teacher Program, a collaborative effort of Sheldon Jackson College, the Alaska Department of Education and the University of Alaska Southeast, is supported by a grant from the Fred Meyer Charitable Trust. The Mentor Teacher Program is designed to support beginning teachers in making a successful transition to teaching in rural Alaska by establishing a collegial support team in participating schools. Support teams include a master teacher, a beginning teacher and a site administrator.

Our thanks to the following districts who are active participants in the 1988-89 Rural Alaska Mentor Teacher Program; Alaska Gateway, Annette Island, Copper River, Juneau, Kenai, Lake & Peninsula, Lower Yukon, Mat-Su, North Slope, Northwest Arctic, Sand Point, Southwest Region, and Yupiit.

Our thanks also to students from Northwest Arctic, Hydaburg, Sand Point and Juneau for sharing the beautiful artwork that illustrates this publication.

Special thanks to the University of Alaska Southeast, Office of Continuing Education for their assistance in developing this publication and to Sheldon Jackson College for hosting our Summer Mentor Teacher Program Institute. Most of all I would like to thank the ECIA Chapter II, Block Grant Advisory Committee for the financial support that made this publication possible.

We hope that this will be the first of a series of publications that the Alaska Staff Development Network will produce for the ECIA Chapter II, Block Grant, Advisory Committee. Last, but certainly not least, my thanks and congratulations to the teachers whose writing appears in this publication. The Alaska Staff Development Network, a coalition of fifty school districts, the University of Alaska Anchorage, Fairbanks and Southeast, Sheldon Jackson College, NEA Alaska and the Alaska Council of School Administrators, is very pleased to use this publication to share a few of the may good things that are happening in Alaska's schools.

J. Kelly Tonsmeire, Editor
Alaska Department of Education
Juneau, AK
April 1989

Introduction

When I was a young student I believed that my teachers had gathered most of the necessary knowledge that existed. There was a set curriculum of "knowledge" to be found in books and transmitted to students, and there was a way things were "supposed to be" for the rest of one's life. Operating on this premise, I came to believe that teaching might be boring—going over the same subject year after year. In my suburb, elementary school life seemed fairly predictable.

Another belief that I acquired while attending my elementary school was that teachers did not talk to each other much, and certainly they did not help each other. I thought that their only contact with each other was when they passed in the halls or met in the mysterious teachers' lounge, where they rested, smoked, and ate lunch. I had no idea that they might be excited about their profession or share techniques and processes with each other. And as I travelled through my higher education it appeared that the competition among teachers (or professors) could be quite serious!

Now I know that my perceptions were not necessarily correct. Teachers do not have to compete; in fact, they are constantly working with each other to improve their skills. I know how hard they work and how dedicated they can be. I know that especially in rural Alaska, and in front of a classroom, it could be a real challenge to apply the theories learned from books to real life.

To readers who pick up this volume, some of the best teachers in the state offer their strength and expertise, in subjects ranging from Mortensen Math to Native games. They also share the concrete teaching techniques and activities that they have personally found to be successful. There are not many books of this kind. I would like to thank these teachers for sharing their trials and successes with us. I would also like to thank them for their perseverance and dedication to improving the lives of young people in Alaska.

Jean Findley, Editor
University of Alaska Southeast
Office of Continuing Education
May 1989

Meeting the Challenge

Bill Radkte

English Bay School
Kenai Peninsula Borough School District

The small rural Alaskan school provides many unique opportunities for education. It was the initial purpose of this paper to discuss some of the successful opportunities which one of these schools provided to its students. It was to be a grand paper. What a list of great programs: Seaweek, kayak building and races, senior store, big bucks, key words, D.O.L., school paper, using local experts, Tlingit Longhouse, carving totem poles, archeology,... The list seems endless.

And so it is. I sat reading the first rough draft to my wife the other night. Fortunately for you and myself she said, "It's not what we do, but how we do it that makes our program a success." She expanded on her proposition by saying that it was our total commitment, our high expectations, and high energy, which made our work so successful. I think she is correct.

We had just put on a musical, "Santa the Fanatic Mechanic". We have no musical background. In fact I have a tough time singing "Jingle Bells". Lora Wilke from the radio station KBBI in Homer was visiting our school. Her comment was that it was one of the best musicals that she has seen a high school perform. Every student was involved. Total commitment. They all knew their lines. They all knew their actions. High expectations. They all rehearsed over and over again – during school, after school, and at home. High energy.

The point is that good teachers are successful not because of what they do, but they are successful because of how they do what they do. A poor teacher can use "key words". It is a program which our school uses at all grade levels, K-12. Each day a new word is put on a card and posted in the room, the students learn this word. They are tested on the word over and over again until it becomes part of their vocabulary. Much the same way Jack London posted words around his room until they became part of his vocabulary. The good teacher is relentless in this pursuit. The poor teacher will just go through the motions. The good teacher will end up with the students knowing 2,340 (13 X 180) new words by the time they get through high school. The poor teacher will end up boring about that many students.

The more I thought about what my wife said, the truer her proposition rang. I reflected back on a night four years ago when I first came into the Kenai District, English Bay to be precise, and John Cook was over at the house. John was in charge of all the small schools at the time, among other things, and he was down observing how things were going. We were discussing what qualities he looked for in rural school teachers. He said, "high energy."

We all know that high energy is a relative term. After all, a worm has high energy compared to a slug. So I asked him to elaborate. By high energy he meant that the teacher is always busy doing something more. The nine to five job can become a seven until ten p.m. job. The high energy performers are the ones that have a list of twenty plus things they are doing (and get done) and can always find the twenty-first. They are the ones who have that added research paper or project for the students to do. They are the ones with the extra resource material which makes a boring lesson interesting. They are also the ones who help clean up after the prom or chaperone a dance without being asked. It goes without saying that high energy people are usually high achievers.

Each year in our school we have program called "Sea Week". The mention of it conjures up visions of tide pool studies and shore line research. We do that, but that in itself if done year after year can be quite boring. It is a time when one can learn first hand more about their environment and this should not be boring, so we make it a total commitment. When we did the tide pools we made them part of our science curriculum unit. The library research became part of the English curriculum. Parents were involved in helping outside. Our school lunches were made up entirely from the food we gathered form the sea. At night around the campfire we had clams and mussels for snacks. When it was over, there was accountability. Students were tested. It was a real learning experience.

High expectations. Another relative term. All teachers have high expectations. Just ask them. The secret of course is for the students to have high expectations to align with these. There is the great story of a roommate of mine in Saint Mary's, many years ago. He was heading back to the village after summer vacation and met a teacher new to rural Alaska going to his posting. They talked and the new teacher was telling Lou all that he was going to do. He was going to teach Shakespeare, Plato and calculus, etc. That Christmas Lou met him again at the airport and asked how he was doing. The teacher was going back home to Montana. He said, "...they couldn't even read, Lou."

So, one should add the term realistic to high expectations. Many, many teachers in rural Alaska are doing outstanding jobs. Just a sampling of these teachers was at the mentor teacher project this last summer in Sitka. They can teach Shakespeare or Plato. The difference is that they take the students from where they are and let them realize these high goals. It's almost like being a good salesman. Get the student to believe in themselves and the rest is easy. Just today we received a letter from one of our graduating seniors of last year. He had enclosed a small note to the students in school. He said, "There is life outside English Bay. Remember there is nothing wrong with dreaming and there is nothing wrong with living up to that dream, so go out and experience it."

Wow, this was great. This was a drop out student from Anchorage two years ago. He had never played sports. He ended up not only graduating, he was state one-arm reach champion at Native Youth Olympics in 1988.

I have to give my wife, who is also the principal/teacher, credit for the dual edge success in not only expecting the teachers to have high goals, but for the students to have high expectations themselves. She demands quality. The students know exactly what is expected of them. They are to do the very best they can. They are to behave properly. That means to display proper manners at all times, do their homework, reach for the stars, and as Joe said, "dream". There is an old cliche, "Good teachers make good schools, and a good administrator can make a great school."

Having high expectations is one thing; having the teaching skills to achieve these expectations quite another. I hate to admit this but by-in-large, primary teachers really know how to teach. They prep the students, they demonstrate, they give guided practice, they check, they give

individual practice. Oh, they are good. I'm a secondary teacher. I sweat when I have to teach those ankle biters. After 17 years in the classroom I feel I'm getting better at the skills of teaching.

Our district evaluates its teachers on the Madeline Hunter clinical teaching method. Dr. Carrigan does a superb job of modeling the method to all teachers new to the district. I had never even heard of the Hunter method before I came to the Kenai and now feel that these skills, though they are no end in themselves, can really help lead to achieving high expectations. No matter what we teach or what projects we are doing, good teaching skills makes success more easily attainable.

Last year we were over at Port Graham playing some basketball and after the game Bob Cochran, the industrial Arts teacher, and I were having a game of chess. We talked about kayak making and he had a good plan for building kayaks which sounded interesting to me. I was tired of teaching computer skills, photography, drafting and typing during electives and when the new semester started my wife asked me what I would like to teach. Kayak building. Yes!

I took a group of boys ranging from the 7th to the 12th grades and we all approached the project with high expectations. Armed each day with the clinical teaching method there were demonstrations, guided practice, checking and individual practice. The results was that every student completed their project very successfully. Those kayaks, which cost a total of $24 each, hit the lagoon, hit the beaches, ran the rivers and provided a lot of enjoyment on the lakes. The entire village was there to see the launchings. Successful, yes. But it was the teaching skills that made it successful.

The last thing that I would like to mention in regard to having a successful project is "focus". I like this word. Focus. Pick a point then go for it. Some schools have good spellers. Why? Because some teacher has focused on spelling. Kipnuk has good chess players. Why? Because one teacher has focused on chess. Any project can be a success when it is focused on. All of you teachers have great projects; focus on them. Have those high expectations, high energy, and that total commitment.

Do it and enjoy the rewards.

Coping!

By Lori Carrell

Yupiit School District

"My life is useless," scribbled a student in her English journal. She was surprised to learn that ninety percent of all high school students felt just the way she did.

Many rural Alaskan students don't verbalize their fears and frustrations, but they are screaming out in other ways. Statistics on suicide, alcoholism, abuse, hopelessness and crime are common knowledge.

As educators, we need to listen to these quiet cries for help.

Why Teach Coping Skills?

What, after all, is the goal of education? When posed with this question, several groups of Alaskan educators have consistently concluded: The purpose of education is to prepare students for the future.

Are we equipping our rural Native Alaskan students with the skills they need to face their futures successfully? Do they know how to make choices? Can they understand cross-cultural communication differences? Is it possible to escape the spiral of alcoholism?

For the last several years, the need for affective education in the schools has been recognized by a variety of professionals. According to the National Education Association, preventive strategies to reduce anxiety, improve social skills and alter self perceptions are much needed. Several communities, including Washington D.C., have asked their school districts to include this type of training in the regular school curriculum. Program after program has been marketed and sold to districts whose teachers have realized the importance of teaching kids to cope.

Affective education is not only supported by counselors, educators, researchers, crisis intervention teams and alcohol treatment centers, but the students themselves see a need for learning in this area. In February 1988, a youth conference was held in Akiachak, an Alaskan village on the Kuskokwim River. One of the activities required students to identify ways their village could become a better place by the year 2000. The suggestion receiving the most enthusiastic support was: "In-school training on how to deal with life's problems."

"Oh brother," said one un-convinced teacher. "We can't teach everything. My job is to teach social studies. Leave that other stuff to the family."

Well my friend, that "stuff" may not be getting transmitted in the family for a variety of reasons. Even well-meaning parents may not be able to impart skills necessary for dealing with a culture in transition- they may have grown up in a drastically different world than their children are experiencing. Choices were certainly not as complicated in remote villages twenty years ago as they are for today's rural native youth. Skills imperative to coping competently have also changed dramatically. Yes, ideally, values and affective education should be transmitted in the home. Realistically, this process has broken down in many homes in the Lower Forty-Eight and is further complicated in rural Alaska by cultural diversity and change. The affective needs of students in rural Alaska are obvious and growing.

Robert Alberts, a teacher in Bush Alaska, reports being stunned by the negative atmosphere and overwhelming problems when he first arrived. After many years of living, working and studying in the Bush, Alberts concluded that, "Coping skills are needed to maintain a state of physical, mental, cultural, spiritual and economic well-being."

He believes that dependency causes a loss of direction which might be remedied by having the following elements at work in a young person's life: support system; open, friendly communication; constructive activities; friendship; freedom from frustration and anger; and a healthy self-esteem."

Other teachers and counselors throughout rural Alaska have also recognized the need to teach coping skills. Several first year Bush teachers have been overheard expressing doubts about their effectiveness and value. "What good am I doing? John may learn fractions from me, but if he feels his life is useless and attempts suicide, have I touched him? Am I making a difference in this village? In these lives?"

Ninety-eight percent of native rural Alaskans who enroll in college drop out the first year. Rarely is academic struggle the sole cause of their failure. These bright students, full of potential, have not been taught the skills needed to cope with life on a college campus. And what of suicide and alcoholism? Are these root problems or simply manifestations of an inability to cope with the difficulties of life; furthermore, are any of us born with coping skills? Very few of our human behaviors are reflexive. Beyond breathing and blinking we must be taught to deal with life. No innate incompetence exists within Native students who fail at college, turn to alcoholism or live in a shroud of hopeless negativity. They simply have not learned the coping skills necessary for their life situations.

To use the word "simply" is perhaps a misnomer, for although the solution seems simple and obvious, the implementation of the process can't be done simply. Who, after all, has these skills and knows how to impart them? What are the skills? How can they be taught effectively?

If schools exist to prepare students for the future, teaching students to cope with life should not be just a recommended possibility or an elective! Appropriately designed affective education training should be a mandatory component of the curriculum.

The Primary Goal of the *Coping!* curriculum is to build self esteem by enabling students to develop the skills they need to copy with their life situations. It is an attempt to meet the affective needs of Native Alaskan students in rural villages. This course of study was first developed for students in Akiachak. *Coping!* can be taught as a separate course to a Peer Counseling Group or At-Risk population. The coping skills objectives can also be expertly integrated into any class content.

Can't We Just Use Lower Forty-Eight programs?

With the development of this course of study comes the recognition that every Bush setting is unique. The individuality of each community is based on a variety of factors: size, race, cultural heritage, ethnic pride, acceptance of outsiders, language base, amount and duration of exposure to outside cultures, strength of elders in the community, church influences, etc. Regardless of the specific characteristics of each Native rural village, one statement can be made without hesitation: the communities and life situations in rural Alaska are definitely different from typical Lower Forty-Eight circumstances. Therefore, affective education materials and methods designed for mainstream America are inappropriate.

For example, one self-image examination tool which calls itself "culturally free" still does not fully take into consideration a variety of aspects of the Yup'ik culture in which it has been used. In response to one

of the statements on the exam, "Most boys and girls are smarter than I," 99% of Yup'ik speaking students in one test setting responded positively, an indicator of low self esteem to the test-makers. However, these students were uncomfortable making such a comparison. When questioned further, some of the older students said they assumed the question was included to test whether or not they were braggarts!

"I often feel like quitting school," was another statement on the exam designed to measure positive self regard. Upon further inquiry of students with a low self-esteem score, it was discovered that one young man felt like quitting school because of his expertise at hunting and fishing. He felt so positive about the skills valued by his family and community that he considered quitting school to utilize his skill full-time. Obviously, the question did not accurately measure how he felt about himself.

Countless activities which are not relevant to rural students' lives can be found in traditional affective education programs such as role-plays using crossing guards, shopping malls and ferris wheels; discussions concerning "When is it okay to drink?" (Not germane in a dry village setting); and videotapes depicting teenage stress as centering around academic competition, driving privileges, hectic schedules, cocaine and peer pressure to dress expensively.

In addition to irrelevant activities, inappropriate methods used in affective education programs can also be a barrier to effectiveness. Soul baring role-plays as an initial tool, "confession sessions" with a not-trusted outsider as facilitator, and assertiveness training emphasizing eye contact and direct "I" statements, may be so foreign and uncomfortable that students become rapidly turned off to the program. Any educator from "outside" who has interacted with rural Native students cannot help but become aware of the myriad of subtle differences in communication style. Some examples from the Yup'ik community include raising eyebrows for an affirmative answer, speaking indirectly when discussing deep emotions and avoiding eye contact when showing respect. For a coping skills course to be effective, these differences must be understood and teaching methods must be adapted appropriately.

One instance of the use of inappropriate methods occurred at a recent youth conference in which students were broken into "family units" of strangers. Complaints filtered down to chaperones from group leaders and from rural students. The leaders, unaccustomed to interacting with rural Native Alaskan youth, complained that the village young people were non-participatory, negative and non-communicative. Several "humiliated" them; others simply skipped the "family" sessions whenever possible. Group leaders, with some alteration of method, could possibly have reached those students. Instead of expecting immediate intense verbal participation, nonverbal activities could have been used to gradually build trust and involvement. Students could have traveled to the family meetings with a "brother" or "sister" whom they already knew. Activities could initially involve the pair, then be repeated with another pair and another, eventually leading to group involvement in comfortable steps.

It is irresponsible of us as educators to expect students to adapt to our method of teaching—our perception of the world. This ethnocentric attitude assumes inferiority of alternate communication styles. An integral part of any educator's job involves modifying teaching methods to correspond with students' learning styles.

Experienced Bush teachers are not surprised to learn that traditional affective education programs are inappropriate and ineffective with rural Alaskan Native students. Just as other components of the curriculum have been individualized for village settings, so must this type of desperately needed education be adapted.

"How do I customize *Coping!* for my students?"

Needs Assessments

As previously noted, one must be aware that all village settings are unique. In addition, within the same community, a variety of convictions and opinions exist along a vast continuum. These variances must be taken into consideration in selecting, adapting or developing an affective education program. Community uniqueness is appropriate and inevitable. Anyone considering developing such a program must individualize and align the objectives with general community sentiment. However, this process is not as complicated as it may sound. Affective education does not prescribe values but rather teaches skills for dealing with life.

Cultural Communication Styles

Since ethnic pride is an important component of positive self-image, the area's cultural values, such as sharing and cooperation, indirectness and respect for others, have been incorporated into the *Coping!* course. Culturally relevant worksheets and activities have been developed and Yup'ik words have been integrated.

General Guidelines

Successful preventive programs as described by James M. Kauffman in *Characteristics of Children with Behavior Disorders* were used in developing *Coping!* and are recommended guidelines.

These include:

- goal focused content
- addressing preventable problems
- appropriately timed (preventive not remedial)
- reinforcing a sense of hope
- integrating environmental factors into the program

Robert Gibson, an author of counseling books, promotes these additional characteristics of successful preventive programs:

- materials paced to students' abilities
- balance between challenging and supporting
- carefully planned activities and content

Classroom Atmosphere

A relaxed classroom atmosphere in which students are not "preached at," "lectured to" or judged is mandatory. All opinions must be heard and students must learn to be supportive of one another. Students should be taught reasoning skills and thinking processes which relate consequences to personal action choices—a skill which enables students to avoid the common "loss of control" orientation commonly described by rural Native Alaskans.. Students' values are not to be deemed right or wrong by the teacher, but will be discussed in relationship to consequences. Decisions shall not be made for students. Rather, students will learn decision-making skills and take responsibility for their own actions. Community involvement is to be encouraged whenever appropriate and possible. Elders are invited to share with the class and students in turn will share their new-found coping abilities with younger children.

Classroom Procedures

- supportive atmosphere
- no judging
- all opinions invited
- no lecturing
- discussion oriented
- participation necessary

- role-playing to practice skills
  (beginning privately in groups of two and expanding as trust and skills develop)
- culturally relevant materials
- community involvement
- cooperation
- careful pacing of materials to abilities and comfort levels
- carefully planned but not overly directive
- growth-centered
  (by individual– not by a prescribed standard level of competence.)
- private journal exchanges between teacher and student

Teacher Characteristics

An experienced Native teacher with characteristics similar to the students would be an ideal instructor for a *Coping!* course. However, other teachers can certainly be successful if they possess these following qualities:

- established rapport with students
- model of positive human relations
- respect, liking and sincere caring for the students
- enthusiasm
- cultural sensitivity
- variety of teaching techniques
- motivating skills
- listening skills

Could you show me a few sample activities?

The specific *Coping!* skills objectives were developed for a particular group of Native rural Alaskan students. Surveys of students, graduates and Native teachers determined the needs to be addressed and the skills to be taught. The objectives developed for this course are not purported to be the magic answer for all situations in rural Alaska, but they may be a starting point from which to launch an affective education program.

Unit Outlines

Me!

Unit One

- Developing a positive self image
- Building self esteem
- Cultivating cultural pride and a sense of uniqueness: Who am I? Who are we?
- Identifying personal values
- Making choices and understanding consequences
- Coping with stress: Healthy habits-nutrition, exercise, planning my time, taking care of myself
- Keeping a positive (realistic) attitude

You and I

Unit Two

- Establishing and maintaining meaningful relationships: making friends
- Listening skills
- Sharing thoughts: self-disclosure
- Expressing emotions: handling anger
- Making peace: resolving conflict
- Creating positive peer pressure in a small community
- Handling negative peer pressure
- Communicating with parents

Life

Unit Three

- Getting through the bad times: dealing with disappointment, loss and grief
- Making decisions
- Communicating in the classroom: overcoming nervousness
- Speaking in public: accepting an award, making an introduction, giving an invocation, etc.
- Avoiding hopelessness
- Preparing for my future: goal setting, parenting, marriage, job interviews, etc.
- Staying safe: avoiding abuse
- Communicating for city visits

Making a difference **Unit Four**

- Helping friends in trouble
- Avoiding the substance abuse trap
- Coping with the changing culture
- "But, what do you mean?"- Preventing intercultural communication misunderstandings
- Getting things done: implementing change

Each unit begins with a vocabulary lesson. Those new linguistic concepts are taught with manipulatives or models, story examples and Yup'ik translations whenever possible. Students demonstrate understanding of the words and ideas before the unit begins.

Sample vocabulary words taught before the *Me!* unit are: attitude, choices, collage, communicate, consequences, coping, cultural pride, goals, habits, lifeline, model, negative, optimistic, pessimistic, positive, prefer, reader's theatre, relaxation, risk, role-play, self-awareness, self-image, stress, trust, unique, values and vocabulary.

Sample activities from the *Me!* unit:

- Building models of the communication process
- Identifying components of the communication model in magazine ads, TV commercials and students' own lives.
- Creating collages of the self from magazine cut-outs
- Participating in problem solving activities which illuminate personal values
- Relaxation exercises
- Self-awareness activities for personal journal exchanges with the teacher
- Developing and performing a reader's theatre on cultural pride

Sample Readers' Theater

Voices

5-	"Or selling their lands
1-	But we
All-	We, the children
2-	Are in control of this place
3-	Because
All-	We are the future

1-	Our cultural heritage continues
All-	Extends
2-	Into the future
1,2,3-	We are the future
1-	Our children will be taught the Eskimo traditions
4,5,6-	Co-existing with the white men
1,2,3-	But never forgetting who we are
3-	Where we have come from
4-	Or where we can go
1,2-	We are the future
1,2,3,4-	Yupiim Yupiucia
All-	Yup'ik pride"

Do these sound like students who have a strong sense of identity? Hopefully, this question is rhetorical.

The overall objective for this section of the *Me!* unit for students to incorporate the uniqueness of their culture into their self-concept, was met utilizing several other academic tasks. Students discovered a form of theatre, transformed thoughts into written ideas, edited those ideas in pairs, analyzed concepts, cooperated as a group to compile the total script, practiced oral reading skills and performed for the entire village community. Obviously, this type of assignment could be successfully integrated into a variety of subject areas including language arts or social studies.

Conclusion

Excited educators, enthusiastic about the *Coping!* curriculum idea, may need to convince reluctant colleagues. The results of a study done by the author through the University of Alaska-Anchorage could be useful. Attitudes toward mandatory affective education were found to be significantly more positive in educators who had received training in **how** to teach coping skills than in teachers and administrators who had not participated in pertinent in-servicing. Misconceptions about affective education ("What do we do? Sit around and talk about our feelings?"), as well as lack of confidence in ability to transmit this type of knowledge were major inhibitors for some teachers. Workshops and teacher training sessions are available for districts interested in adapting an affective education program to meet their students specific needs.

What exactly does it mean to "cope?"

Cope-(verb) To contend with successfully, manage, get along; survive, subsist (slang): Hold one's own, rise to the occasion, make the grade, cut the mustard, hack it, come through, deal with.

Student will "cut the mustard" at school. "Hack it" at home and "rise to the occasion" after graduation.

Coping! may not qualify as a measurable behavioral objective for professional lesson plans; however, the challenge of teaching coping skills is a challenge someone needs to accept!

Do you want your students to be able to cope? Do you want to see one more student's potential washed away in an ocean of alcoholism or ended abruptly by suicide?

Can **you** cope with the challenge of adapting a *Coping!* skills curriculum to your community?

Affective education for Native rural Alaskan students should not be a matter of convenience or ease, nor should it be left to chance. For the ultimate behavioral objective demands attention: "Student will survive."

But How Do I Teach All Those Grade Levels and Subjects?

Lance C. Blackwood

Egegik School
Lake and Peninsula Schools

I believe this is one of the most frequent questions that all teachers in a small one or two teacher school ask themselves, when they first arrive on site, and perhaps one that other teachers, considering teaching in this type of setting, might also ask themselves. Some prospective teachers, who perhaps would make excellent teachers in rural Alaska, might hesitate making the choice to come and work in a small school, because they don't feel they could effectively teach so many varied grade levels and subject areas.

Granted, teaching in a K-8, K-12, or other multi-graded setting certainly may be initially more of a challenge than if you only have one grade level to be responsible for. Just remember, there is no one effective way to teach in this type of school setting; I firmly believe no two teachers teach exactly the same way. Each teacher has their own strengths and weaknesses, and you must realize you may not be completely competent or comfortable teaching every subject area and/or grade level.

I can, however, give you some suggestions regarding techniques, strategies, and classroom management tips that seem to have worked quite well for me over the years in working with a large span of grades and levels of subject areas.

Schedule

Try to stick to a regular, consistent daily and weekly class schedule, and you will find the students will automatically switch over to the next subject area. In my daily routine, for example, my students have learned:

After the pledge to the flag, the students get out their math books. But, some of the students know that before this, they must first study the set of flash cards they are currently working on. They have learned they study these cards for a few minutes, then bring them up to me for a quick drill. Only then do they get out their math books.

The students have also learned that ten o'clock is spelling time. They don't always need me to tell them to put away their math books and get out their spelling books. They also know they work in their spelling books until I say..."Let's get ready for recess..." After morning recess is over, they know it's reading time, until I say...Let's get ready for lunch..." I won't bother to go through the whole daily schedule, as I believe you get my point.

If you can keep to some kind of consistent schedule, you will find your students will monitor themselves to a great extent and help keep things moving smoothly.

Varying Schedule

Now please don't think I keep to this type of daily schedule 180 days, come rain or shine. I don't think either my students or I could stand this much consistency. I do vary it somewhat, depending upon the time of the year, holidays, the students' interests, and yes, even my own interests. Let me explain what I mean by these...

The Time of The Year

I find it beneficial to stick to a consistent schedule during the beginning of the school year. This allows the students to become familiar with the daily and weekly routine of school, especially for any new students, such as kindergartners or transfer students. I also try to stick to a consistent schedule during the winter months, or those months when the weather is not suitable for doing much of anything outdoors.

December, January, February and March are usually fairly cold months here in the Bristol Bay area. Generally too cold or overcast for the students to want to venture outdoors for a hike or extra P.E. activities. So, I will work the students hard during these months, so when the nice warm Spring weather rolls around in April and May, I can let up on them, and extend their recess time, or lunch break, and do some activities outside that we couldn't do otherwise. (Pilot Point, Egegik, and Ivanoff Bay Schools do not have new school facilities. These schools are the old Bureau of Indian Affairs structures, built back in the 1940's and 50's. There are no gym facilities for indoor P.E. and recreational activities.)

Holidays

As in any other school, these students enjoy the holidays and look forward to any celebration of them. This will naturally call for varying the schedule to accommodate preparing for its celebration. Halloween, Thanksgiving, Christmas, Valentine's Day, and Easter usually mean more art activities, evening programs, school parties, and rehearsals for school plays. Obviously, this means you may not do as much formal teaching as you normally would.

In these small village schools, you will generally find the annual school Christmas program is one of the social highlights of the year. Generally speaking, you will have the major task of putting it together. You will want to give yourself plenty of lead time to prepare for this: making sure the students have enough practice and rehearsal time, setting up the stage, and making sure you have enough time to order and receive supplies you will need for the program. This particular holiday will be the time in the school year when you will vary your regular schedule the most.

The village people generally expect some kind of school Christmas program, so you simply do the best you can and take whatever amount of time is necessary to prepare something. The most difficult problem you will have in putting together a Christmas program is finding a play that matches up with the number of capable students you have available, who can read and memorize the lines. But, it can be done, and the parents and other village community members are usually very grateful for your efforts.

Student Interests

This may also apply to the time of the year, but I'll call these examples student interests.

When the conditions are right, I usually vary my schedule to allow the students to go ice skating as part of our P.E. activities. I have also never let a winter go by without at least one good old fashioned snowball fight, or snowman or snowfort construction. In Pilot Point School, we had cross country skis for the students. Naturally, we had to take advantage of those few winter days when the conditions were right to use them.

> No lesson plan I've ever written was considered absolute and/or unalterable. If I write a lesson plan for one group of students in reading, for example,

> No lesson plan I've ever written was considered absolute and/or unalterable. If I write a lesson plan for one group of students in reading, for example, and one of those students is absent on the day I planned to do the lesson; I have often delayed that lesson, and reassigned a more independent type of lesson for that group. This is because I want to try and keep that group together as much as possible. Now, if I know that student is going to be out of school for several days, then I will go ahead with the lesson as planned. But, a one or two day delay is not going to make a major difference in their progress.

Sometimes I may notice that a student is having a personal problem of some kind. Perhaps he/she is having a problem at home, or a member of their family is having a problem which is affecting the student, or the student is just fatigued or bored with a particular subject area. If I feel it would be in the student's best interest to abandon the particular lesson I had planned, and assign the student something else, I will. That scheduled lesson can wait another day or two.

Teacher Interest (Or Lack of Interest)

Administrators, parents, and/or local school committee members may not like to hear this, but there are times when I may not necessarily be at my best for various reasons. Perhaps I am beginning to come down with a cold or the flu; perhaps I didn't get a good night's sleep, or I may be temporarily feeling down in the dumps about some personal thing in my life. It may not warrant having a substitute teacher fill in for me, but it may be enough of a problem that I may vary my planned schedule until I am feeling up to resuming the normal school routine. I have always taken great pride in trying to stay healthy enough to teach day in and day out. But, even teachers have their ups and downs now and then.

Individualized Instruction

In a school setting where you have a span of grades K-8 or K-12, you obviously do very little class instruction. A good portion of each student's daily work is on an individualized basis. You will have small groups, such as in reading, spelling, or social studies. But, generally speaking, your students will be progressing along at their own individual pace and speed, even though some students will be in the same level texts. Some examples follow:

Here in Egegik, I have three students who are in the same basal reading text. One of the students is an excellent reader and doesn't like to read the story orally with the group, as the pace is too slow for her. So, once I've introduced the new vocabulary words for the story, that student returns

to her desk to read the story silently and answers the questions by herself. The other two students remain with me and we read the story orally. This allows that one student to at least progress through the lesson at her own pace and not have reading become a dreaded or unpleasant subject.

In the math area, I happen to have an exceptionally bright group of kindergartners. They are all at different levels. One has even started working in the third grade book. It is not because I'm such a fantastic teacher, but rather, this particular student masters most of the skills so quickly, she doesn't need a lot of drill and practice for review. It wouldn't be fair to keep any of these three students together as a group in math because they each learn and master the basic skills at different speeds. This certainly requires more effort and time on my part to keep them challenged and moving along, but it is important to keep each of these students interested in math and looking forward to learning new skills.

I also have a third grade and a sixth grade student who, in addition to their grade level math books, are working part-time in a ninth grade algebra book, as they need more challenging and stimulating work than what is in their current grade level texts.

You may find some older students will only ask for your assistance when they are having difficulty. Others will appear to be constantly in need of assistance as they are afraid of trying a task on their own and making a mistake. And, of course, the younger students will need a lot of your direct instruction to move them through their lessons.

Small Group Instruction

Having small groups of students working together and progressing through the same texts will be as close as you come to teaching an entire class. The majority of the time, I group my students together according to ability level, rather than grade level. There is no point giving a fourth grade student fourth grade text books if that student is only functioning at the third grade level, or lower. The opposite holds true as well. There is no point giving a fourth grade student fourth grade text books, if that student is functioning at the fifth grade level, or higher.

You will find that your students will vary in strengths and weaknesses in certain subjects. Perhaps your fourth grade student will be capable of working in the fourth grade Reading, Spelling, and English books, but only in a second or third grade math book, or third grade Science, or Social Studies book; then that is where you should place that student.

There is one word of caution that I want to mention about placing students according to ability level, rather than grade level. In these small village schools, you often have several brothers and sisters in the same classroom. It may happen that a younger sibling is extremely bright, and could possibly progress to the same ability level as their older sibling. Even though you could conceivably teach those two in the same level text book, I would not recommend it. The older sibling's self-concept and self-esteem could be devastated by this, not only in school, but at home as

well. Put that older student in a higher level textbook than the younger student, while providing the older student with supplementary materials and instruction. The sake of convenience on your part just isn't worth the risk for that student.

Informal Assessment

In order to properly place students in appropriate level books and materials, you must first know the ability levels of your students. The results from previous standardized test scores will give you some clue, but do not rely solely upon those scores.

The most effective means of finding out what your students know and don't know is to do some brief informal assessments of your own with each student. Try to do this during the first week or two of the school year. Some examples:

Math

Put together a "test package" of flash cards, one set for each of the four basic operations of addition, subtraction, multiplication, and division. Then simply call up your students one at a time and see if they can mentally compute these. Obviously, if a student can't successfully compute the basic addition and subtraction facts, there's no need to test that student on the multiplication or division cards. Make a note of these on each student.

Next, make up, or find some ready made sheets which will test the students' ability to compute problems in the four basic operations. Of course, you will want to make sure these problems progress in a hierarchy, or level of difficulty.

With kindergarten, first and second grade students, you will also want to test for number readiness. Can they orally count in sequence? Can they identify the numbers 1-20, 1-50, 1-100? Can they identify the missing number in a sequence of numbers, etc?

Continue informally testing your students in the basic skills of math, until you have a pretty good profile of each student's strengths and weaknesses. This will help you better determine the grade level text book in which to place your students.

Reading/Reading Readiness

With your kindergartners and first grade students, find out if they can recite the alphabet, if they can identify the letters in order, or at random. See if they can associate the correct sound with the letter. When presented a picture, can they give you the first sound that picture begins with? Can they give you the last sound? Find out if they can give you another word that rhymes with that picture. Have some basic sight words available, and find out if they can read any of these. This will give you a

good understanding of where these younger students are in their reading development.

With the older students, administer the placement test which accompanies most basal reading series, to double check that students are properly placed, and don't need to review or skip a level. Listen to your students read orally for signs of fluency, their pauses at periods and commas, their inflections. Do some students have particular problems with short vowel sounds, long vowel patterns, contractions, multi-syllable words, etc? Only then, can you appropriately place students in the correct level reading text.

Spelling/Language Arts

About the easiest way to quickly assess of students' skills in these areas is to give them a writing assignment. You can then look for spelling error patterns, capitalization and punctuation errors, and their manuscript or cursive writing ability.

No one will know your students better than you in your school or classroom. No one will be able to determine what is in their best interests as far as their school work is concerned, than you. Make decisions on your students' behalf, and be willing to accept the consequences, either positive or negative, of those decisions. You are the one who will be working with those students day after day, and hopefully year after year.

Supplementary Materials

A wide variety of supplementary materials is a necessity when teaching in a multi-graded school or classroom. In a K-8 setting for example, it is possible to have as many as six different reading groups or levels to teach. It is just not effective to attempt to run and manage six basal reading groups or levels at the same time. Depending on your students' abilities, you will find that about three basal reading levels or groups per session will be a manageable number to teach during your daily reading period. So, what do I have the other three groups or levels of students do for that session?

This is where your supplementary materials come in. There are an infinite supply of good quality, instructive, supplementary reading materials available on the market today. I will tell you what I use as an example of how to assign your students more independent reading assignments, so you can devote some quality time and instruction to those students you plan to work indirectly with, on any particular day.

Reading

Barnell/Loft has an excellent series of reading booklets called The Specific Skills Series. Each booklet covers a specific skill area, e.g. Getting The Main Idea, Getting the Facts, Working With Sounds, Drawing Conclusions, etc. The grade levels span from 1-12. In Egegik School, all my students work in these booklets. I would recommend you place your stu-

dents one level below their instructional level, to get them off on a successful note.

Of course, SRA still produces excellent supplementary reading materials. I also use these. Milliken produces a reading comprehension series of disks for the computer, beginning with about third grade reading ability, and progressing through high school level. This program also keeps track of each student's grade and progress. At the end of each quarter, I can obtain these results and record them in my grade book. I have used these in Pilot Point School, and continue to use them here in Egegik. And there is nothing wrong with having one or two students read a library book during part of their reading period once in awhile.

For the younger students, besides those levels of the Specific Skills Series that I can use, I also have read-a-long books/cassettes, or books/records that I can use with my K-1 or K-3 students. I also like the DLM (Developmental Learning Materials) Auditory and Visual Perception materials produced by American Guidance Service Co.

So, I have about three or four sources of supplementary materials that I can assign students for independent reading work. This not only allows for better management of the classroom, but as I said, allows me to concentrate, without a lot of interruptions, on two or three groups for direct instruction.

Math

Milliken also produces an excellent computer program in math (appropriately called Milliken Math), which I use here in Egegik School. It covers the four basic operations, plus fractions, decimals, percents, integers, and laws of arithmetic. I generally run two or three students through some of these lessons each math period. Like the reading series, this program also keeps track of each student's progress and allows the student to move on to the next higher only level when they have successfully mastered the previous level.

Of course, you will want to have a variety of manipulative materials for your younger students to work with, to help them visualize certain math concepts.

I also use Allyn and Bacon's Series of Fraction and Decimal booklets, to give some of my students a more concentrated exposure in these skill areas. I am a firm believer in students mastering their basic facts in addition and subtraction before introducing larger two and three digit numbers, or carrying or borrowing. So, I have several sets of flash cards available with which to drill my younger students. The same goes for multiplication. Have your students memorize those times tables cold before exposing them to more difficult multiplication problems.

Language Arts

Milliken also produces computer materials in this area—spelling, grammar, punctuation, and alphabetizing. Addison-Wesley produces a series of language arts and vocabulary worksheets/cassettes called The Target Series, which students can progress through. I also like Curriculum Associates materials (although these are not so much for use as independent materials, as they are for direct supplemental instructional use).

So, basically, make sure you have a good source and supply of supplementary materials that students can generally work through on an independent basis, to leave you free to concentrate on a few students and/or groups of students for direct instruction. Don't try to teach new material to every student at once, or have every student in their standard textbook, or basal series at once, as it is too chaotic to expect to do an effective job. Otherwise, you will be doing more crowd control than any kind of meaningful instruction.

Student Tutors

This is one practice that I originally tried not to follow—whereby older students would work with or assist younger students in a particular subject or skill area. I always took the attitude that teaching the students was my responsibility and my area of expertise, and the students' role was to learn from me.

But here in Egegik, I have found myself allowing more of the older students an opportunity to work with, or assist the younger students in some of their lessons, particularly when that older student has completed their assignment in a particular subject. This has naturally evolved, as you might imagine, where you have such a wide span of ages and grades of students seated in the same classroom. Often I am involved with a group of students on a particular lesson, and I just can't drop what I'm doing, or be constantly interrupted to assist other students who may very well need some assistance. So, they naturally go to an older student for help. What I always find to be satisfying and refreshing, is to see a seventh or eighth grade student, who is diligently working on an assignment, take the time to be interrupted from their train of thought, and stoop to help a younger student.

Especially in this type of school setting, you can take advantage of older students tutoring and assisting younger students, and having those students enjoy it. I just happen to have one third grade student who wants to be a teacher when she grows up, so she is more than willing to offer to work with any student needing extra help. Don't hesitate to use this resource.

Free Time

One of my most often used phrases in my directives to students is..."You can do something quietly at your desk now." By that I mean the student has completed an assignment, and there isn't enough time left in the particular period to begin another assignment. So that student can have free time to work on something else quietly at their desk, or at some other place in the classroom where they won't disturb the other students who may be still working on their assignments. Such quiet activities could be:

- Working at the computer
- Reading a library book.
- Looking at or reading one of the school magazines.
- Listening to a casette/read-a-long story.
- Coloring or drawing.
- Working with some manipulative materials.

The student is not allowed to just sit there and stare into space. They must do something, as long as it is non-disruptive to the other students. Surprisingly, other students don't seem to become upset when one or more students have free time and they may not. The other students know, sooner or later, (maybe later that day, tomorrow, or the next day), they too will be able to do something quietly. So don't feel you have to keep your students occupied every single moment of the day. Once you have trained your students not to disrupt the others, they will be able to handle the free time given them, especially if they realize this time can

be lost if they don't abide by your one request...quietly. (And it's not an excessive amount.)

Keeping Students on Task

"If you waste my time during reading, math, spelling, etc., I will waste your time during recess..."

This one simple rule has worked very well for me over the years. I have had many students learn this rule the hard way, while others had only to see other students stay in and work during recess to abide by this rule.

What I try to train my students to do is, when it's math time, they should be working and/or talking about math; when it's reading time, I expect my students to be working and/or talking about their reading assignment, etc. and not about the movie that was on TV last night, or what they plan to do after school. If I look around and see a student off-task and I look up again later and see that student off-task again, that student will not be called to recess and will not be called to go home for the day. Instead, that particular student will spend their recess time working in whatever subject they were caught not being on-task.

Initially, I may remind a student to get busy or settle down and get to work. In most instances, this may be enough to keep the student on-task. You will find, if you initiate this policy at the beginning of the school year, that it will work quite effectively for you. You don't need to make a big deal about it; just mention this rule. When a student violates this rule, calmly tell them that at recess time they will have to work in their math, spelling, reading, etc. as they wasted too much of your time. That student may be quite upset with you momentarily, but it will be one of the last times that student will think about not attending to his/her work.

Discipline

Disciplinary problems are, I feel, closely tied with keeping students on task. Generally, I have never had what I would consider a serious problem with student discipline. If you keep your students on task, they don't have a whole lot of time to get into mischief.

Giving your students excessive amounts of free time can lead to disciplinary problems with some students, as they just may not be able to handle all that free time. I always try to assign my students enough work to keep them on task for most of the period to avoid having students with forty five minutes of free time in a sixty minute period.

One thing our district recently implemented in all its schools was a student/parent handbook, outlining very specifically what is expected of each student attending a school in our district—attendance, tardiness, student rights and responsibilities, etc. Each student is given a copy of this handbook at the beginning of the school year for their review and for their parent's review, so they know up front what is expected of them.

I never have and never will believe in the students making up the class room rules. You are the teacher; you are responsible for their education and their social behavior while attending your school, or classroom. So, you make the rules, and it is up to the students to be willing to accept the consequences of following the rules that you set, and that are outlined in the student handbook. You will find that in such a school setting, you and your students will become more like a "school family," than just a teacher and his/her students.

Volunteers

Here in Egegik, I have had the luxury of a few people in the community volunteering their time to work with the students on occasion. One man, who has artistic talents, works with the students once a week for about an hour on various art techniques in drawing, shading, and painting. The students have picked up some art skills from this man, that I wasn't able to provide the students, not possessing a strong background or personal interest in art.

A young woman has volunteered to work a few afternoons each week with one of our students, who is having difficulties in most subject areas. This student has made noticeable progress since she began giving him the one-to-one intensive attention he needs, that I am not always able to provide.

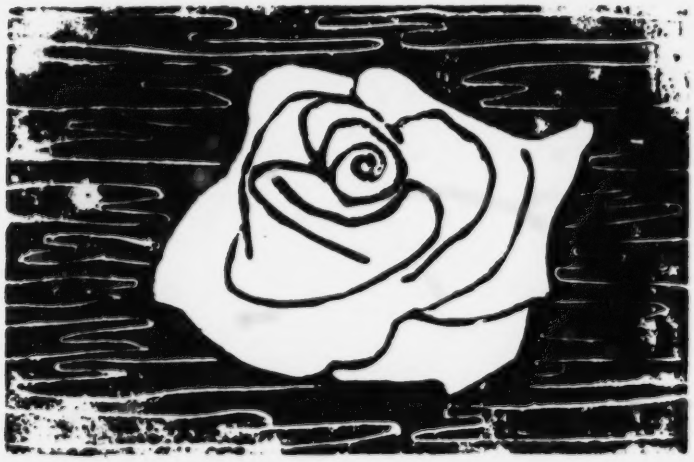
Once in awhile, my local school committee president comes in and teaches an art lesson with the students, as a change of pace for both the students and me.

So, to summarize this chapter on how to teach a wide variety of grades, ability levels, and subjects:

- Stick to a regular and consistent daily/weekly schedule, to allow your students to monitor themselves in switching over to the next subject or lesson.
- Vary your schedule, as you feel is necessary, to accommodate special occasions and holidays, student interests, and your interests.
- Remember that most of the students will be taught, and will progress on an individualized basis, at their own pace or speed.
- Group your students according to their ability level, rather than their grade level.
- Find out each student's strengths and weaknesses before placing them in their textbooks. This can easily be done with quick informal assessments on your part.
- Make sure you have available in your school or classroom, a wide variety of supplemental materials. This will allow you to have some of your students working independently on in-

structional assignments, so you can devote quality, and direct instruction time to the rest of your students.

- Using older students as tutors and helpers with some of your younger and less capable students, is a natural occurrence in this type of school setting. Don't hesitate to use it.
- Make allowances for students to have free time to pursue other interests, as long as they don't disrupt the rest of the class.
- Train your students to monitor themselves, to keep on task, with the understanding that if they waste your valuable teaching time, you will waste their valuable recess time.
- Keeping students on task will do more for you than any other technique, in keeping discipline problems at a minimum. It is important that you make the class rules, as only you should be the one to enforce them. Having a student/parent handbook available for all students is also a positive approach in outlining rules and expectations for which your students will be held accountable.
- Welcome and encourage those individuals in your community who wish to volunteer their time, services, and expertise to work with the students, that you and your local school committee feel would be of benefit to the students, particularly if it is in an area you are not as qualified to teach.



A Novel Approach

(Especially for the Upper-Elementary)

Mary Olsen

Sand Point School
Sand Point City Schools

Introduction

At the mentor-teacher conference in Anchorage in September of 1988, a quite poignant anecdote was related. A very experienced elementary teacher was wonderfully successful at teaching students their multiplication facts. Teaching them each year was such a trying experience for the other teachers. But the children in Mrs. McCoy's class not only learned their times tables but came out of her class beaming and jumping for joy. "What is it she does?" they all asked themselves but never dared ask her. As the years passed, however, the other teachers came to respect her abilities in this area so much that they asked her if she would teach their classes the multiplication facts, and in exchange they would teach her class. Every year they felt gratified that their students returned to their classes knowing their math facts and having a new-found love for math; and they were content with this arrangement. But one year Mrs. McCoy retired and left the community. When the teachers again came around to multiplication facts during the following year, Mrs. McCoy was not there to teach their students in her special way, and she was not there to even ask what it was she had done that was so special. She and her knowledge were gone forever.

It is in that light that I would like to share some of the ideas I have found in the last few years of teaching upper elementary grades. After teaching junior high language arts in Sand Point for fourteen years, I have become painfully aware of some of my students' shortcomings upon entering seventh grade. One particular one kept cropping up year after year with increasing frequency. As a part of our reading and literature study, each student selected a "good" book, usually a classic, and prepared an intensive book report for me in which he or she had to address character development and characteristics, plot, theme, author background, etc. For most students writing the report was a difficult but rewarding task; however, many students said somewhere during the process, "Mrs. Olsen, this is the first book I have really read since first or second grade when we read the books with all the pictures. This is the first book I've read that

had just words." How sad, I thought and went on teaching junior high, for I was very busy in my area.

Three years ago a teacher resigned in mid-year and with budget crunches as they have been, I was asked to teach the upper-elementary for the remainder of the year. When I took over, the students were reading novels – *Secret of the Andes, Zia, Black Pearl.* Their settings were in South America or Mexico, which the students were studying in social studies. They were reading about twenty pages a day and answering three or four questions in complete sentences and discussing them as a reading group the following day or two. I finished the year continuing the same program but added more detailed questions in order to be more certain that they were following the threads of the story plot.

I began to see possibilities for comparison with social studies knowledge. For example, in *Secret of the Andes* the treasure of Montezuma had been saved and was being guarded in the Andes by Indians. The students then remembered how they had read that the Spanish had taken all the treasure. They wanted to know which was historically accurate. I didn't know, but this conversation led to a discussion of legends and how one must not necessarily believe all that one reads even if it is in a a history book.

Later on a group of fifth graders read *Julie of the Wolves.* They enjoyed the book, but it was interesting that although they were Alaskans, they had no concept of Eskimo life, of living within the Arctic Circle, or of wolves and wolf packs. Naturally, this book led to a discussion of authenticity– "Could wolves really behave as they did with Julie?" Also, passages were sometimes obscure, such as the one describing where the leader Amaroq sprayed her. "As his eyes softened, the sweet odor of ambrosia arose from the gland on the top of his tail and she was drenched lightly in wolf scent."(1) This led to a discussion of euphemistic language and a very earthy discussion of urination and dog submission stances the students could relate to their own experience with dogs.

By the end of the year I was sold on the idea of using novels as part of an upper elementary reading program, especially if it complemented the social studies program.

The following year I was assigned to fifth grade. My fifth grade class divided into two reading groups. One group consisted of avid, able readers and the other of average, hesitant, and unenthusiastic readers. Because of their broad appeal, after completing a unit in our basal readers, we began our first novels with animal stories– Big Red by Jim Kjelgaard and The Red Pony by John Steinbeck– to develop interest in "book" reading.

Question Worksheets

The first and longest part of the novel approach involves the use of question worksheets. Questions are supposed to employ all of the levels of Bloom's Taxonomy. Many of mine, however, are lower-level in order to get students "on board" the program and experience immediate success.

Some sample questions from the worksheets of *The Red Pony* were the following:

1. Describe Bill Buck. (Students had to go to text to quote author physical and character attributes.) 2. According to Jody, what was a way to judge a fine horse? (Students were supposed to gain awareness of characters' ideas and feelings.) 3. According to the author, why did he bait the rat trap? (Students needed to notice the direct statements of author into a story.) 4. How were Gitano and Easter alike? What did Jody's father say about old things? What did Billy Buck say about old things? (Students needed to see characters and how the characters' ideas compared and contrasted.) 5. How were the water tub and the cypress tree opposites and enemies to Jody? What did each one stand for to him? (Students were to study objects as symbols with special meanings for people.). Which of Jody's daydreams was your favorite? (Students were required to make thoughtful, reasoned choices.)

At first I typed student questions. Then I discovered that even though students had learned to write in cursive themselves, they had little experience reading the cursive of others. Therefore, I assiduously began writing them in cursive. At first my "r's" were difficult, but once we agreed that any letter they couldn't figure out was probably an "r", the questions concerning reading the teacher's writing abated and became more of, "Mrs. Olsen, I have read ten pages and I can't find this answer." or "What does this question mean?"

My students wrote their answers in complete sentences which reinforced the skill of turning question sentences into statements and utilized the capitalization and end punctuation skills we had learned in our language books. One of the skills that some students seem to discover sooner or later, is that it is easier to summarize information than to write all of it. I encourage this skill. On a scale of difficulty, the first skill is to find the answer to a question in the text. I always thought that was pretty easy until I came across readers who made up answers because they thought that was the way the author should have done it or those readers who were directed to a certain page or a certain paragraph, and after reading it to themselves, still were not able to "see" the answer. At this point I asked them to reread the question to me and explain in their own words what they thought the question was asking. Sometimes I had used a word or phrase that was confusing to them. Then when they reread aloud to me the paragraph containing the answer to prove to me that they could indeed read it, I would finally see their eyes light up with understanding.

Group Discussion

When students had completed their written answers to the questions, we met as a group for discussion; this was the second component of the novel approach. At first, there was often confusion over the answer and three or four different answers would be offered. We then referred to the book as our "bible" and found the passage that gave the answer. Sometimes there were groans, and at first some students would have only half or fewer of their answers correct. But they did learn that the answer was there for them to find.

All of my questions are asked sequentially so that students learn to read the question and read until they find an answer. Only occasionally have students read to find an answer and not read the entire selection because they are given sufficient quiet reading time, and if they do skim, they feel they have missed the event that their fellow group members are excitedly talking about. They learn to trust that I am not pulling any tricks as a teacher. They also begin to notice that their scores improve until the questions get downright easy before the book's end. Sometimes, as students grow in confidence, they have tussles for a correct answer. The rule that for the answer to be considered correct it must be proven by text passages' when applied, sometimes means that I am asking a question vaguely or unclearly, or that simply more than one correct answer can be found. They also love the "what do you think" questions because there are no wrong answers, and they like discussing the better answers. After discussion, students are handed new worksheet questions and continue until the book's end.

Discussion periods serve not only to answer the questions but to pull the story together, remind students of what has happened before, what they have now learned, and to think about what will happen next and how it may all eventually turn out. Sometimes I also use a discussion period as time to fill in background information. For instance, when we read *Snow Treasure* this year and were talking about the Gestapo, I explained

the special functions of the secret police as compared with the regular invading army and navy. Also, we compared the "gentle" invasion of Norway with the crueler one of Poland, and they acquired a better picture of the great scope of World War II. In reading *Hans Brinker* we discussed the celebration of St. Nicholas. That conversation led to a historic discussion of how Christmas celebrations actually had their origins in heathen customs and to a discussion of how all European countries have developed specific customs of celebrating Christmas; whereas, the cosmopolitan United States has absorbed may of those traditions and developed its own potpourri of holiday customs.

Vocabulary Development

Another important component of the novel approach is that of vocabulary development. An understanding of both book-specific words and general words is important. When reading a certain book, we learn a dozen or so words that are easily related to a certain place, country, time, or activity. For example, some of our words in *Snow Treasure* were Gestapo, barracks, fjord, bouillon, blackout, sentry, goose step, and Cleng Peerson (Norwegian sandwiches). The military words are obvious. The coast of Norway is renowned for its fjords. The boat, the Cleng Peerson, which carried the gold treasure or bullion was camouflaged in a fjord. It would be difficult to follow the story without an understanding of these essential words.

The word "smorgasbord" was a special fun word for Sand Pointers to discover. The people of Sand Point are primarily a mixture of Aleut and Norwegian background. One of the favorite treats at special parties is the open-faced egg sandwich served with flakes or strips of smoked salmon on top. Suddenly they had discovered something Norwegian right at home and immediately adopted the word as their own.

Words from *On the Banks of Plum Creek* by Laura Ingalls Wilder were primarily prairie and faming words: calico, tableland, mustangs, dugout, whitewashed, threshing, yoked, black-eyed Susans, scythe, parched, freshet, knoll. Words from Hans Brinker by Mary Mapes Dodge, which takes place in Holland were primarily those relating to Holland or its people: pavilion, metropolis, meerschaum, industry, thrift, urchins, burgomaster, deluge, hedges, "tiffin" (lunch), herring, "voetspoelen" (the race), tulip. So much of that book deals with heroes, customs, and uniquely Dutch words.

General vocabulary is emphasized to the degree of proficiency of my students and the importance of those words to the enriched comprehension of the story. I try to stay away from words that are obscure and which appear in the story incidentally; instead, I emphasize those which appear frequently. It is important to remember that vocabulary study is meant to enrich the overall understanding of the text being read and should not become boring or too difficult. I love words and I want my students to have that same "come alive" discovery that words are fun.

In dealing with students who have a fairly proficient vocabulary, just pointing out the interesting words or enriching is sufficient. Often one encounters a group of students, however, whom I would call "vocabulary resistant". Such students, for whatever reasons, seem not to be affected by words, not able to grasp their meanings from context, nor able to retain them when emphasized.

I have found that the novel approach is an effective way of getting "in the door" with such students. The first activity we do before reading a section is doing a vocabulary worksheet. The worksheet is composed of 15-25 words culled from the reading selection. The following are examples:

page 25 **outstripping** the **fleetest** among the skaters

page 41 "...the children **idle** away an hour"

First, students decode and pronounce the words. Page numbers are always given and words are pulled sequentially from the text. Students then work independently, looking up the word and reading the paragraph in which it occurs. They are then asked, to the best of their ability, to write down what they feel is the meaning of the word. They are not allowed to use the dictionary because it is the skill of acquiring meaning from context that is more important and ultimately utilized much more frequently.

While it is true that some words in a certain context do not have many clues given, most do, and it is those clues which students are taught to recognize and to utilize in their reading. Previous references, opposites and comparisons, appositives or explaining phrases, and definitions are some of the devices I help them to see. Sometimes, however, when a specialized word such as "burgomaster" needs to be clarified, I read the dictionary definition. My students were given credit for their imprecise definition that he was "a very important person." In fact, students are given credit for trying and having an answer which is vaguely correct. They are not given credit for that which is "way off" the mark. As we correct and reread the passages, I more fully explain and sometimes draw a picture to illustrate a word's more accurate meaning, and students are encouraged to write that meaning or synonym on their papers.

The following day, students are given a vocabulary quiz, usually one in which they must define the words. Since these students are not avid homework doers and don't have the skills to study for such a task, I have to teach them. One successful method I have found is to cut up pieces of paper, the numbered half containing the vocabulary words and the lettered half containing the definitions. I also compose an answer sheet. I place all of these into an envelope on the table. As a group, they sort and match words with meanings until the group feels it has them correctly matched. They then check with the answer sheet. Each person takes four or five words and matching meanings to study either by him/herself or quietly with a partner. (I actually had to teach my fourth graders how to: a. Put the words in a stack with the word in front, b. say the word and its meaning, c. look at the definition behind it, and d. if you were right, good, continue to the next word until you know them all.) Then they exchange

with a person until they have exchanged all sets and know all the words. Finally, they take the quiz.

The first time or two, students found they had hurried too much or not focussed enough and had forgotten up to nearly half of the words. After a couple of tries, however, nearly all remembered at least 90% or more and were ever so proud of themselves. One time we incorporated the whole process into one of our quarter goals of following directions. Every instruction was written on the board and each student had to follow every step without consulting a classmate for help. There were several places around the classroom to pick up and put down papers and materials. The process consumed an hour's time, but in that time all the students had gotten to "home" and were pleased with themselves.

Since vocabulary study is intensive and can get bogged down, I do tend to stress it during the beginning half of a book and slack off toward the second half. With question worksheets, I usually do them throughout the entire book, but sometimes on a quiet day when students are well into a book and interest is high, it is fun to just have a "free-read" hour of several chapters or about thirty pages. Students enjoy it as a gift from the teacher, and after all, reading is a privilege isn't it?

Follow up Projects

Finally, we do complete a book. What then? Sometimes another novel or return to our basal readers and complete another unit. Often, however, a book has opened a lot of doors and posed a lot of questions that need to be researched and clarified or has aroused feelings that need to be stated be-

fore being put to bed. In that case we spend one or two weeks working on "project" phase of our novels.

The project will always end in a physical display constructed by the members of the reading group and placed in the classroom or in the hallways for other students and parents to see. It consists of the book's title and author, various kinds of writing, art and craft work.

The following was the project design students completed for

The Red Pony:

1. Each person draw a picture of one section of the *Red Pony*– show main idea of that section
2. Two people– write a report on John Steinbeck
   – use the library
   – cover
   a. his life and travels
   b. what he wrote about and names of books he authored
   c. style of writing and awards he has won
   d. list your sources
   – name, date, pages read
3. Two people– write a summary of each part of the *Red Pony* and "Junius Maltby"– one paragraph about each;
   – write a paragraph about "Junius Maltby" regarding Steinbeck's feelings about education and what he thought was important in life.
   – Answer questions like:
   Who knew the most - his son or the other children?
   Why did the father choose to go back to San Francisco?
   What will the boy's future be like - better or worse for the change?
4. Make a display outside the classroom. Put up reports and paragraphs, cut out letters, etc.

This kind of display was typical.

A later book we read entitled *Blue Willow* had the same setting as the *Red Pony*, but we more closely aligned it to social studies and compared the lives of migrant children to the students' own lives. On the migrant issue we discussed the Migrant Education Program in our own school and why there was a need for its development. As a final project, students wrote to their three United States congressmen and proudly placed the formal replies onto their display.

That display contained a one page summary of the story; a report about agriculture in the San Joaquin Valley of California, which coincided with our previous geographic and climate study of the United States; a report on cotton (how/where grown, picked, harvested, etc.); a cotton bulletin board (composed of a cotton plant and a collage of pictures from magazines and catalogs made after reading about cotton products in encyclopedias); a chart listing in complete sentences twenty things they had learned about migrant workers' lives; and a "blue willow" plate, painted on paper plates displaying their own special place (they also explained why that place was special to them).

To correlate with the fifth grade history of the United States and to provide background for the Revolutionary War, one group read *Johnny Tremain* and the other group read *My Brother Sam is Dead*. Reading historical fiction is an excellent way of learning the details of certain times and places, insights into the every day customs, and the way of life and values of a group of people. If the book is told from a child's viewpoint of both participant and observer, it seems to make a time "come alive" to students.

This correlation is also a valuable tool for teaching students to differentiate the historical from the fictional. Two activities which work very well are these: 1. make a list of the true events/people in the story and a list of made-up people and events 2. make a timeline of this book, listing 10-15 events of the story and place them on the timeline correctly. These activities lead to all kinds of decisions and skills.

Some characters are historical but have fictitious things said about them. Did some of the events actually occur, or were they just depicting things that may have or probably occurred? On the timelines students have to deal with order and sequence, and stories are not necessarily told in sequential order. They also have to learn to briefly summarize an event so that it is meaningful and yet can fit within space constraints and be visibly appealing. If one is resourceful enough, even special bits of humor may become part of the displays. For example, an answer to the question in *My Brother Sam is Dead*, "What state of hunger were the people in?" received these two original student replies, "Pennsylvania" and "New York."

Later on, to focus on the issues of racial prejudice and slavery, one group read *Slave Dancer* and another read *Roll of Thunder, Hear My Cry*. The *Slave Dancer* group wrote a report on slavery and drew a map of the slave routes. As a group, they listed on a chart twenty things they had learned about slavery and slave trading. Each person chose a character and described how that character looked, using the physical descriptions from the book, and give examples of the character's actions and told what those actions said about what kind of person he or she was. They researched history books from the high school and library and drew pictures of slave ships showing how slaves were stacked row upon row, and of slave auctions, and of slaves at work in the fields and on plantations. Finally, they made a statement of their feelings about slavery.

Needless to say, they felt that slavery was wrong, cruel, and inhumane, and each individual gave one specific reason why; and, as a group we added a summary sentence which connected it to the *Emancipation Proclamation* they had just read about. If you had mentioned writing an essay to this group of students, they would have been dumbfounded, but as a group having been so inundated with information, both reading and vivid visuals, they had little trouble composing a most enlightened and persuasive essay that astounded many adults who read it.

Conclusion

To quickly summarize the novel approach, it:

a. correlates with social studies curriculum

b. consists of these components:

   1. vocabulary study
   2. question worksheets
   3. discussion groups
   4. project displays

c. supplements/complements a basal reader program but does not take the place of one

d. closely guides students through the actual reading of long stories until they are comfortable with them and see books as friendly, not formidable foes

e. enables avid, fluent readers to become more active, intensive, thoughtful readers

f. teaches practical reading passage comprehension skills

g. creates an interest in and love of reading, especially among more hesitant readers

h. offers an approach that may be effectively adapted to any upper elementary through secondary reading program and can be especially useful in rural schools or schools with multi-graded situations because it works very well as a large or small group activity

To answer the questions of where I acquire books or what books can be used is easy. Schools often have library purchases. We purchase some of ours through the RIF program. Most I purchase myself in multiples of 7-8, which accommodates most of my reading groups. I purchase most as paperbacks through the student book clubs. Most books are Newberry, ALA, or Caldecott selections or have other important endorsements. I choose a variety of topics, both current and classic books. I try to choose them based on three factors: what we will be studying in a certain year, my students' needs and interests, and my students' ages and reading level abilities. In a rural school we have the greatest options of flexibility, and we have a chance to know and adapt to our students' particular needs.

Here are a couple of helpful ideas. To help preserve paperbacks, our librarian laminates the book covers. Also, we participate in the Battle of the Books program so our school has multiple copies of these books which we pass around from class to class, and which could be done from site to site for a month's time. This accomplishes two goals– an intensive group reading of the Battle of the Books selection for all students and helps every student become involved in the program, and secondly, it saves money. I would also like to mention one pitfall to avoid, which I learned after falling into it. We were going to read *Heidi* earlier this year, and I gathered up a dozen copies around school. Lo and behold, I found I had four entirely different versions from which to work. I had no idea there were so many, and eventually ended up purchasing my own group of the same version. So make sure all students have the same book, or at least the same version.

Because of our intimacy as a rural community, we can have the best of worlds if we as teachers are willing to work hard enough to provide and bring it together for our students. I sincerely believe "the novel approach," in addition to being a play on words, is also a program uniquely suited to the needs of a rural school and hope many rural teachers will be persuaded to try some version of it.

Respect and the Rural School: Integrating the Handicapped

Annie Keep-Barnes

Levelock School
Southwest Region Schools

When I was ten years old I saw my first handicapped person. I remember how old I was because I was in the fifth grade on an outing with Mrs. Markly and my classmates to the Oregon Museum of Science and Industry, a remarkable place where at least ten of my friends and I could stand inside the right ventricle of an enormous heart and listen to the "thump, thump, thump" of blood being pushed through gigantic veins. It was just outside this heart that I observed a procession of children stagger and sway by. Shocked and frightened by what I saw, I slipped up to Mrs. Markly and whispered, "What's wrong with those kids?" Mrs. Markly replied, a little sharply, "there's nothing wrong with those children. They are handicapped. And please, don't stare. It's impolite to stare."

As a child I was uncomfortable and awkward around the few handicapped people I came into contact with. Knowing then that it was impolite to stare, I simply averted my eyes, and didn't see them at all. I, and all my peers, except the few who might have had a handicapped person in their family, grew up never knowing a person who was handicapped, and thus, were condemned to feel ill at ease and even frightened by what we did not understand.

This story does have relevance to "Adapting Curriculum to Bush Education". It has to do with unique opportunities for modeling humanity in the very small schools, and for accepting people for what they are, rather than how alike me or you they may be.

I wanted to write the definitive essay on just how exactly one should mainstream a handicapped child in the rural school. I wanted you to read it and be able to say, "Aha! A clear cut recipe to follow that will magically transform my non-mainstreamed rural school into the ideal place for all learners." I thought this was going to be easy; after all, we did it here in Levelock. Well, it's not all that easy after all. I find, following note after note to myself, that all I have left to tell is a narrative—the story of how one village school has made an ever expanding effort to integrate a handicapped child into the school.

Levelock is a tiny village in southwestern Alaska. When the village is full, we have 125 people. This is a beautiful river village, particularly in autumn when the trees are brazen and brilliant with gold or in winter on a day like today, when those same trees are made delicate and crystalline from a frozen fog. This village is no worse or better than other small Alaskan places. We have alcoholism and drug abuse and people with whom we'd rather not socialize, and we have broom dances and carnivals and Slavi visitors and wonderfully kind people who see that no one goes without meat.

Nine years ago the villagers here met their first multiply handicapped person—a child who came into the world fighting for his life. He was born with a spinal encephelocele which caused trauma to his brain resulting in hydrocephalus, cerebral palsy, blindness and retardation. This child's name is Chad. As an infant, Chad struggled with pneumonia and the complications of his condition. He had the most important ingredient for survival: a supportive family, particularly a mother who waited through each night to listen for the sound of his breathing and who plagued the school once he was of age to see that he had every right that was due him.

I met Chad when he was four and a half years old. Having already spent an hour a day in school for a year and a half, he was experienced in the act of being dropped off by his mother and he didn't like it much. His teacher, Pam, gave him comfort and taught him the first lesson of school, that this is a safe place and the people here love you. This was not an easy lesson for Chad, who tantrummed for an entire year. When I met him, most of that was behind him. He was ready to get down to the business of learning.

The First Year

There was no conscious decision to integrate Chad into the regular classroom. It just happened that there were three people, a mother, a primary teacher and a special education teacher that assumed it was only appropriate that a primary student should be with his peers. We had a silent agreement, almost a pact, that this child's experience would be what all children his age experience. We started slowly. I could play the guitar and wanted Chad to hear the kids singing, so Robin, the primary teacher, made a place in her schedule for us to come into their circle time and sing. And there in that circle of children, little hands began to stroke Chad's soft skin and reach over for his hand to hold. Squabbles began over who would get to push his wheel chair from my room to theirs or who would twirl his chair in recess time. Robin solved the problem by assigning weekly helpers as part of their classroom job chart.

The year I had Chad I was also teaching resource room at the same time. I would bounce back and forth from the mat where I was doing physical therapy to the table where I was facilitating individual reading programs. When I got desperate, I would open the door to Robin's room and ask if she could spare Chad's helper for a while. That first or second

have to anticipate them or watch very closely to see what he was trying to say. The students were learning the value of belonging and of welcoming someone unconditionally into their lives.

It wasn't until we got a new student from Bethel this year that a student asked, "What's wrong with him?" The children who have been part of Chad's life from his early days in school are very well aware that Chad is blind and retarded and has cerebral palsy, but are not so aware that there is something "wrong" with him. Which of course, there isn't. He's a child and a classmate of theirs who requires special attention.

The Years That Followed

As Chad grew and became more and more used to school, his needs became more specific and his programs were harder to integrate into the regular classroom. While his peers were writing their first plays, Chad was learning his first signs. While they learned to dribble a basketball, Chad was painstakingly inching his way across the gym on a scooter board. He needed to be able to have his programs merge withthe programs of his classmates while not taking from either of them.

We came up with a clipboard program that his classmates could do with him. They were required to read several step directions independently ("Take Chad to the lockers. Tell him that the lockers are next to him. Tell him to find the lockers. Chad will want to pound on these, so let him!) and then to collect data on which activities they finished and if he responded appropriately. Some days the activities would have challenges for the students such as travelling through the school with Chad and finding everything that was cool to the touch or rough or smooth. We were trying to encourage their independent reading and direction following as well as to fulfill Chad's environmental awareness goals.

Chad has astounded the experts with the amount he has been able to learn. No one thought he would live, let alone learn to sign and indicate a preference for activities and people. We attribute much of this to his love for school and his attachment to his "friends" (one of the first signs he learned). The eight children with whom he has travelled through the grades have devoted a lot of time to learning his signs and practicing them with him, as well as participating in many of his programs.

This year we have expanded the clipboard idea and are having the students write mini reports every time they work with Chad. I've taken a few samples to share with you here:

What We Did

> I asked Chad who he was then I waited about 18 seconds then I asked him again. Then he put his hands on his head (Chad's sign for himself). I told who I was. "I'm your friend Chad." Then I said "Say friend." And he did. (Aaron)

grader would come into the class and do range of motion exercises with Chad or help him explore things tactilely while I worked with one of my other students. It was easy to teach the primary students how to perform some of Chad's programs and they were always willing and excited to learn.

Art and P.E. were the class periods that worked best for us then, in addition to singing and recess time. The students took time to consider Chad's needs. It became an area of problem solving for them to devise ways to adapt classroom activities to the needs of a handicapped person. We made a point, too, of seeing that Chad was very much a part of every school function. He had a history of crying during community programs and his mother was hesitant about bringing him. We made it clear to Chad's mom that we would be devastated if Chad wasn't at the annual Christmas program. He was, after all, part of the primary class. She brought him, and amidst the pandemonium and hustle of the pageant, we sent one of his classmates to take him from her protection and into the excitement that they all were sharing. And while they sang, with him down in the middle, he laughed and waved his arms. The villagers laughed with him and couldn't help themselves from waving back.

Robin and I have talked a lot about the benefits we saw emerging that first year. Those primary student helpers were responsible for someone else. They were learning that Chad couldn't enjoy recess without them holding the ball in his hands or squeezing the clay between his fingers, that he wasn't yet able to tell them what his needs were, so they would

> We went up and down the hall with Chad touching the wall. He felt the fountain, a door frame, a window frame, banged the lockers and squeaked the door handle. (Ty)
>
> Chad was good when we opened his locker and he liked the window and the book. I want to be with Chad lots. Because he is fun to play and work with. (Shawn)

Special Education Services of Anchorage has been a consulting agency to me since I've worked here. They have supplied endless support, ideas and materials to us. They left us several tactile books that the students could read to Chad during their reading periods and he could touch as they went along. This activity inspired some to author their own tactile books.

Other programs Chad's classmates are participating in are scanning and localization (he has to locate them by hearing them call him), choice making (he chooses who will push him; they offer two objects for him to choose from), self help skills (hair brushing, having him wipe saliva from his hand before shaking hands, wiping his own mouth) and communication (currently using a squeaker to call his classmates when he wants them).

Four years ago another child was born in Levelock who was as severely involved as Chad. Lance is Chad's first cousin and like Chad, is hydrocephalic, blind, severely retarded, and has cerebral palsy. He is currently in his second year of school. Lance's adjustment to school was as difficult initially as Chad's, but the framework was in place for a smooth assimilation into the school. We've tried, as is only right, to keep Lance with his own peers. That's been difficult because we have no first graders this year and only three second graders. Luckily, starting second semester, we are piloting a preschool program in our village where the preschool age children will come to school for three hours in the morning to be instructed by Robin, rather than a classified aid. There are six preschool students, all Lance's contemporaries, and we're excited to help facilitate a relationship with these children and Lance.

Staffs are usually very small in rural Alaska. Because of this they are forced to work closely together and interact with each other continually. I have been very lucky because I have worked with three remarkable teachers who are both talented and flexible. They have welcomed my handicapped students with sincerity and enthusiasm. For integration to work, teachers must believe that it will enhance the learning of all the students. Robin Anderson in the primary school and Claudia Caffee and Ed Keep-Barnes in the elementary school have all had the vision and creativity to make mainstreaming work.

Hidden Agenda

I don't have "The Big Picture" on handicapped people in the villages around the state. I don't know if most are kept at home in the villages or if most are sent to Anchorage or Valdez. I know that in this small village our handicapped are cared for here. It has been a personal agenda of my to make my students as important to the village as any member of the community. They are part of every event, every play, every party. They are nominated and celebrated as "Students of the Month" if they have achieved that. My goal has been to make them so much a part of the community and so much a part of their peers' lives that the community will feel a sense of responsibility for them should they lose their own families. These children of mine will always require someone to care for them, and hopefully, through integration, there will be people who will care about what happens to them.

We worry a lot out in the bush about all the things we can't provide our students. We know very well that we can provide the basics and a smattering in whatever special areas we may be interested or experienced in. And we know very well that we can't take our students to museums and libraries, that many of them will never have seen a sidewalk before thy are tested on it on a standardized measurement and that there hasn't yet been a test devised for reading the landscape or tracking and skinning a caribou. We know that for reasons we can't control, such as language, or home life, or substance abuse, many of our students will not come close to attaining the "National Average" school boards are so fond of quoting us. We can, in whatever school we teach, in whatever community, teach dignity and respect and the sense of commitment to other people.

Native Games in Physical Education

Valerie J. Bjornstad

Kotzebue High School
Northwest Arctic Borough Schools

Introduction

The first exposure I had to Native Games came when I began my teaching in Kotzebue in 1984. Not knowing much about them, my first Native Games Unit consisted of only five or six activities. With unclear goals and objectives, I struggled through it only because it was required in the Physical Education curriculum. Since then I have realized they can be a valuable and unique tool to teach many different concepts and skills. Today I use fifteen different activities and end the unit with a Native Games Tournament. It has become one of my favorite units to teach.

I wrote this article to share activities and ideas I use to teach Native Games. I also hope to receive feedback and ideas from those who already use Native Games and from those who are trying them for the first time. I am anxious to hear what works for you, what doesn't work, changes and additions that might be made, and your ideas on ways to incorporate Native Games into the Physical Education curriculum. I also hope to encourage those who don't incorporate Native Games into their Physical Education curriculum to do so either as a whole unit or to adapt parts of it to fit their needs.

History of Native Games

Games and play are activities universal to all men. They grow out of peoples' customs, beliefs and needs for physical activity. They are a way to communicate and a means of expression. When games and play are transmitted to the children, they become traditions and a part of the culture.

Because of the environment and the different lifestyles of the people of Alaska, the games of Alaskan Natives are unique. The games of different Native groups have as many differences as they have similarities. All regions have games that are unique to their own areas while some other games are played by several different regions with only slight variations.

But whatever the games, they require a high level of agility, endurance, concentration, and skill.

Alaska Natives held games to demonstrate their skills and to match them against others including people from other communities. The skills involved in early games, such as seal skinning, were those actually needed to survive. Other skills used in games mimicked the animals and activities of an area such as the Seal Hop, Walrus Pull, and Owl Hop. There were also games played that emphasized the great physical strength and endurance needed to survive in the sometimes harsh environment of Alaska.

Games were held for celebration of culture and the celebration of special events. No records were kept in the early days, but the games survived through the stories handed down by the elders of the communities. A story that is repeated often in Kotzebue is of the Two Foot High Kick. In the 1930's, an elder named Walter Lincoln, who at the time was possibly 56 years old, left a challenging and unforgettable kick for others to try to repeat. Mr. Lincoln stepped into a soot box to blacken the bottoms of his mukluks and then performed the two foot high kick. He left behind him two perfect foot prints on the ceiling and stated that that was his last jump. Stories like these have helped preserve Native Games.

Formal and organized games evolved through the efforts of people like Alexi Pleasant, a boarding school student in Anchorage. Alexi formulated the idea and lead in the organization of the first Native Youth Olympics which were held in 1971. Native Youth Olympics later became recognized as an official sport of the Alaska School Activities Associa-

tion. Other organized events featuring Native Games were formed with the desire to help people remember the traditions and the cultures of Alaska. These events include the Eskimo/Indian Olympics which are held annually in Fairbanks, and the Arctic Winter Games which are held biannually in different locations in Northwest and Yukon Territories of Canada and in Alaska. Records are finally being kept in these events, and that helps preserve the Native Games of Alaska.

Curriculum Ideas

Native Games develop strength, endurance, and flexibility, along with self-esteem and sportsmanship. With today's increased focus on culture and tradition in Alaska, Native Games can have additional value in the Physical Education classroom. They are a way to develop an understanding and appreciation for the Native people and their games and athletic contests.

Teaching Techniques and Activities

1. Learn and practice a variety of games.
2. Take part in a Native Games Tournament.
3. Explore aspects of Native Games.
    a. Research how culture develops games and athletic contests.
    b. Research games developed by Alaska Natives. Trace their history and the purpose of the games.
    c. Research different games specific to your area.
    d. Compare and contrast with games of other cultures in Alaska, the United States, and the World.
4. Test over the history of the games, the description and action of the different events.

Course Outline

This is a simple course outline I use for a three week unit on Native Games. Class size ranges from fifteen to fifty students.

1. Introduction

This can be done in a variety of ways.

A. Use one day to introduce the different events and have students demonstrate them.

B. Invite community members or guests to help demonstrate and teach the events.

2. Practice

Students work in pairs and practice all events that are set up in a circuit. (see sample floor plan pp.60) Allow students ample time to practice each event. A full rotation of the circuit may take more than one day. Class should complete the circuit more than once. Some events are difficult and students should not be expected to succeed immediately. Note: Have students partner up with someone close to their own size, and have them use different partners throughout the unit. More than one group may work at each station together.

3. Tournament Sign-up

Students sign up for five to ten events they wish to take part in during the tournament which is held at the end of the unit.

4. Practice Again!

Students work with a partner or on their own at their own pace to prepare for the tournament. They should work only on the events they signed up for.

5. Tournament

Ideas for a tournament are on pp. 58.

6. Test

Students are tested on the history, rules, and description of the different events.

Events

Kneel Jump

Stance and start: Kneel on floor with feet pointed back.

Movement: Using upper body momentum, thrust yourself forward and land on both feet, maintaining balance.

Judging and scoring: Three tries.

Furthest distance is the winner.

Notes: Also called the Knee Jump

Toe Jump

Stance and Start: From a set line grab toes. Knees must be bent.

Movement: Jump forward as far as you can without letting go of toes and maintain balance

Judging and scoring: Three tries.

Jump will be measured from set line to heel.

Toes must be held.

Butt Jump

Stance and start: Two players, standing back-to-back, feet together. Their butts should touch and their heels should be six inches apart. There should be a line three to four feet in front of each person or an eight foot diameter circle around them.

Movement: Using Butt, try and push opponent forwards.

Judging and scoring: Winner will be the one who pushes opponent across a given line.

Breaking contact is an automatic loss.

Notes: The basketball key makes for good boundaries. Have the students start in the center of the key facing the sides of the key.
During the tournament use a judge to center the players.

Stick Jump

Stance and start: Feet together, grab stick with both hands, measuring the distance between hands.

Movement: With stick on thighs, jump up and over stick without loosing grip. Then without resting, jump back to original position.

Judging and scoring: After each jump hands are moved two inches closer. If hands meet, put away the stick and join hands. The winner is the one

who successfully jumps at the smallest distance between hands. Contestants are given three tries at each distance.

Notes: Have the students do this event on mats so when they miss it is easier on their fingers.

Chair Wrestle

Stance and Start: Competitors sit on chairs facing one another. Both opponents grab stick with one palm up and other palm down. Feet remain off the floor and must not touch legs of the chair or floor at any time.

Movement: Twist opponent off the chair.

Judging and Scoring: Best out of three.

Contestant is winner of round if opponent falls off chair or if his opponent's feet touch the floor or chair.

Notes: Other students may be needed to hold the backs of the chairs down. Judges are used to determine a winner.

Elbow Walk

Stance and Start: Lie in prone position on floor, feet together and grab ears with hands. Only elbows and toes may touch the floor.

Movement: Walk with elbows for as long as you can.

Judging and Scoring: The greatest distance.

Notes: Place this event with the Owl Hop, Knee Walk, and Seal Hop in the circuit. That way if you are using a timed rotation with your circuit, the students can practice all events during the allotted time instead of only one. (These events are the most strenuous)
Remind students to wear long sleeved shirts or sweat shirts.

Knuckle Hop

Stance and Start: Raised push-up position on your knuckles and elbows at the sides of the chest. Fingers curl under so competitors are supported by the heel of the hand and knuckles.

Movement: Hop on toes and knuckles simultaneously.

Judging and Scoring: Furthest distance wins.

Must hop without stopping or touching the floor with any other part of the body.

Attempt is stopped for resting, raising the upper body above upper arms, bending at the hips or touching the floor with knees or stomach.

Girls may do the knuckle hop with the arms extended and on the open hands.

Notes: Gloves may be used to practice.
Also called Seal Hop.

Owl Hop

Stance and Start: Lock one foot behind knee, bend half way down.

Movement: Hop forward for distance without straightening leg.

Judging and Scoring: Furthest distance wins.

Attempt is measured to the point where contestant loses foot-knee contact or loses balance.

Knee Walk

Stance and Start: Kneel on floor and grab feet around the area of the toes or ankles. The only portion of the body touching the floor is the knees.

Movement: Walk on knees without letting go of feet or ankles.

Judging and Scoring: Furthest distance wins.

Notes: Remind students to use sweat pants.

One Leg Twist

Stance and Start: One foot is placed against the wall at a measured height.

Movement: Contestant throws body over the leg held against the wall and lands standing up. The foot held against the wall can pivot but it must not loose contact with the wall.

Judging and Scoring: Three tries.

Winner is the contestant who successfully jumps and twists body over the leg held at the highest point.

Notes: A good way to practice this is to take a short running jump to the wall.

Stick Pull

Stance and Start: Competitor sits on the floor with soles of feet touching the soles of his opponent's feet. Stick is held above their feet with their palms down.

Movement: Try to pull opponent without jerking on the stick.

Judging and Scoring: Choice of starting grip is determined by a flip of a coin then alternate positions each turn.

Contestant is the winner if opponent can be pulled over, releases grip with one or both hands, or falls sideways.

Best of three tries.

Notes: Bracers can be used for this event. Bracers are students who place their backs or feet around the students pulling to help keep them stable.

Leg Wrestle

Stance and Start: Both competitors lay flat on the floor with heads in opposite directions. Hook opponents elbow and grab own wrist, the outside leg bent with foot flat on the floor.

Movement: Swing leg nearest opponent three times vertically. On the third count lock legs and try to roll the opponent.

Judging and Scoring: Beginning leg is determined by the flip of a coin. Alternate beginning leg. If legs don't lock in three tries then the judge will place legs in the locked position.

Two out of three tries is the winner.

Two Foot High Kick

Stance and Start: Start from a standing position any distance from the target.

Movement: Walk or run toward target and jump with two feet together. Kick target with one or two feet and land on both feet at the same time and maintain balance. Feet stay together during the entire jump.

Judging and scoring: Three tries at each height.

Target will be raised at two inch increments until there are three finalists then it will be raised at one inch increments.

Winner- Highest kick. If there is a tie the winner will be the one with the fewest misses.

Notes: See sample score sheet to record results.
For set up of this event, throw the kicking ball through a basketball hoop and attach the string to a chair placed off to the side. When it is time to change the measurement, the chair just needs to be moved a little farther to the side. (See drawing pp. 57)
The starting measurement is determined by the ability level of the class.

Toe Kick

Stance and start: Feet together at a given line. Stick is placed in front at a measured distance.

Movement: Using toes, jump forward and move stick backwards landing in front of the original place of the stick.

Judging and Scoring: Three tries at each distance.

Stick will be moved forward at two inch increments.

Winner-person who successfully jumps the greatest distance.

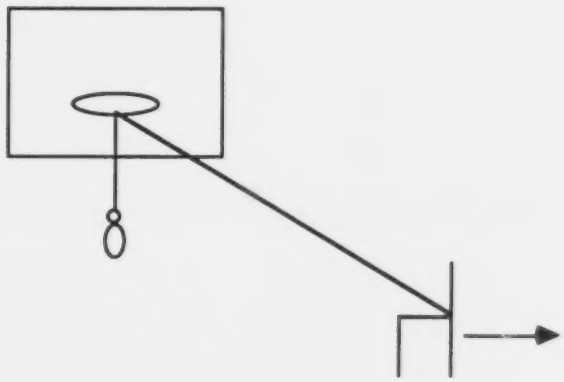
One Foot High Kick

Stance and Start: Start from a standing position any distance from the target.

Movement: Walk or run toward target, jump with both feet simultaneously and kick the target with any part of one foot and return to the floor landing and maintaining balance on the kicking foot.

Judging and Scoring: Three tries at each height. Target will be raised at two inch increments until there are three finalists, then it will be raised at one inch increments. Winner will be the highest kick. If there is a tie, the winner will be the one with the fewest misses.

Notes: The kicking ball is thrown through the basketball hoop with the string attached to a chair off to the side. When the measurement needs to be changed, the chair just needs to be moved a little further to the side.



Tournament

At the end of the unit we have a tournament. This gives the students a chance to compete and measure their skills against the rest of the class, and in some cases, the rest of the school. I also use it as a skill test for part of the students' grades.

The requirements are as follows:

Students must enter a minimum of five events.

Students may enter a maximum of ten events.

Two points are given for each event entered.

First place in any event receives three additional points.

Second place in any event receives two additional points.

Third place in any event receives one additional point.

25-23 points = A

22-20 points = B

19-18 points = C

17-15 points = D

14 and below= F

Sign-up sheets are posted on the walls and students sign up about a week before the tournament starts for the events they wish to take part in.

The tournament will last about a week depending on the number of students in the class and the number of events in the unit.

Sample Tournament Schedule

Day One

One foot high kick-boys and girls separate (see sample score sheet pp.19)

Those students not participating in that event can be working with a partner who acts as a judge to get measurements for any of the following measured events:

Toe Kick

Toe Jump

One Leg Twist

Kneel Jump

Stick Jump

Students record their results on the score sheets for the events above.

Day Two

Two Foot High Kick– Boys and girls separate

Once again those students who have not signed up for this event work on events listed above or act as judges for other students.

Day Three

Elbow Walk
Knuckle Hop
Knee Walk
Owl Hop

Boys and girls compete in separate heats. (This is done for the skill testing purposes, but results can be compared after the events.)

If a large number of students sign up for these events, qualifying heats may be necessary.

If the above events finish, start the bracket events.

Day Four And Five

Bracket Events

The bracket events include:

Butt Jump
Stick Pull
Leg Wrestle
Chair Wrestle

Boys and girls are randomly placed on separate brackets. Events may be done either as double or single elimination contests depending on the number of students and the amount of time available.

These events can be split up into two different days, the Butt Jump and Stick Pull one day and the other two the next.

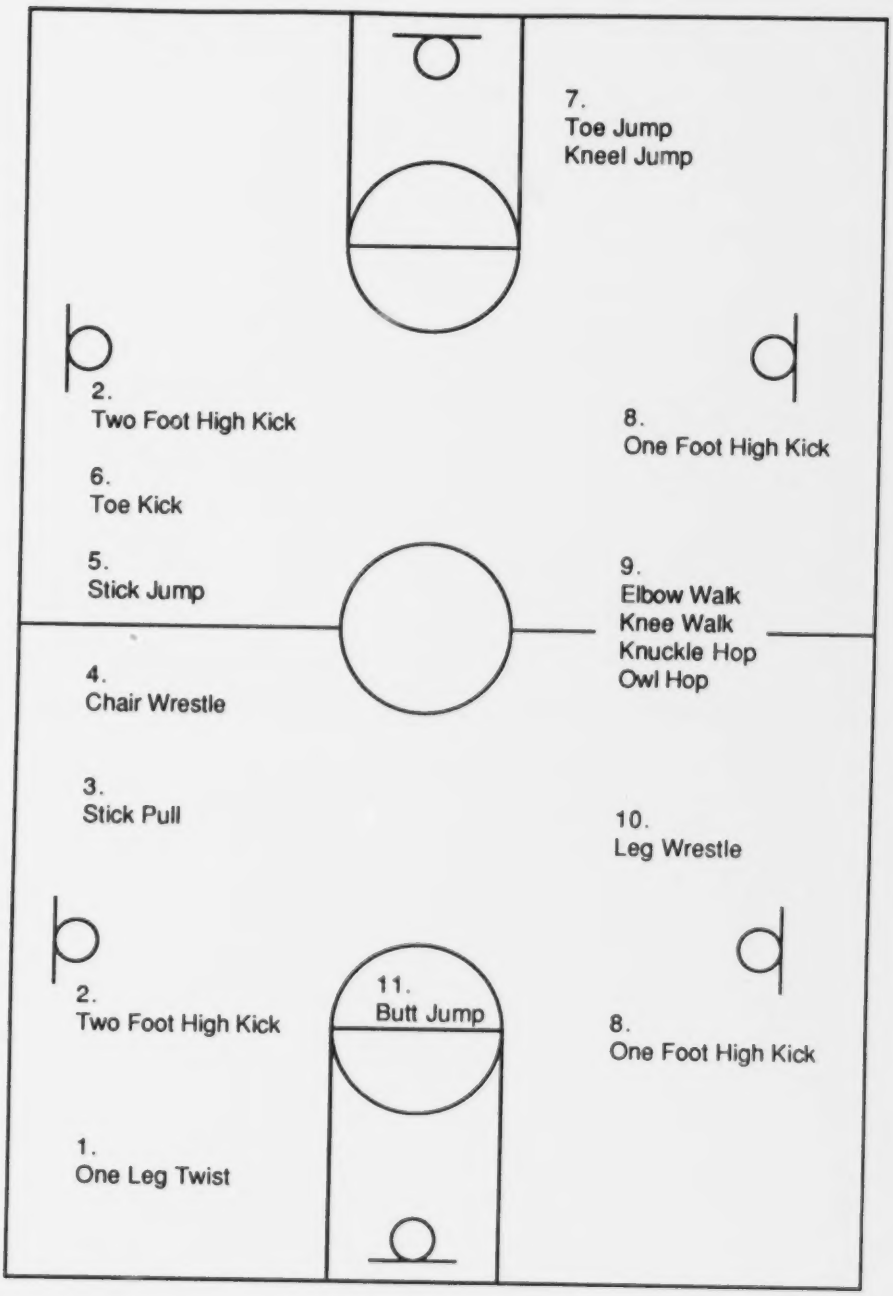
I usually sit at a table and call out the names of the students who are up in the different events. It is their responsibility to flip a coin to determine the starting position and to get the necessary judges or bracers. When they are finished, the winner reports to me.

Students who have been eliminated from the events may act as judges or finish up any measured events they have signed up for.

Awards

Awards are given out to the top three finishers in each event for both the boys and girls.

Floor Plan


7.
Toe Jump
Kneel Jump
2.
Two Foot High Kick
8.
One Foot High Kick
6.
Toe Kick
5.
Stick Jump
9.
Elbow Walk
Knee Walk
Knuckle Hop
Owl Hop
4.
Chair Wrestle
3.
Stick Pull
10.
Leg Wrestle
2.
Two Foot High Kick
11.
Butt Jump
8.
One Foot High Kick
1.
One Leg Twist

Equipment

Equipment for Native games is minimal and can be made quite easily and inexpensively. Listed below are some ideas for equipment.

Yardsticks and Measuring Tapes

Though not as important during the practice sessions, yard- sticks and measuring tapes are needed to measure the results of many events.

For the One Foot and Two Foot High Kick, usually two yard sticks taped together is the easiest and quickest way to measure the height.

Other measured events can be done with a tape measure or with floor tape or athletic tape put on the wall or floor with the inches marked off.

A rolling measurer is handy for the Elbow Walk, Knee Walk, Seal Hop, and Knuckle Hop. If one is not available, the distances can be marked off with tape and then measured with a regular measuring tape.

Sticks

A large number of sticks in a variety of lengths and sizes are needed. Old broom handles can be used to make many of them.

For easy measurement of the Stick Jump, have the increments marked on the stick with a marker or on tape placed on the stick.

The Toe Kick used a stick one inch in diameter and approximately twelve inches long.

The Stick Pull stick should be one and a half inches in diameter and is twenty inches long.

For Chair Wrestling and the Stick Jump, a broom handle cut to about three or four feet in length can be used.

Kicking Ball

The kicking ball for the one foot and two foot high kick is easily made. We had an over abundance of athletic pre-wrap at school so I used the spool it comes on as the center piece to give it a little weight, then tightly wrapped the pre-wrap around it until it was four inches in diameter. Using athletic tape or string a loop can be made from the top. Then I wrapped the outside with athletic tape. Fur pieces, rags, or plastic balls may also be used to construct kicking balls. Ideally, four kicking balls should be available for class use although two will suffice.

Sample High Kick Score Sheet

	Height								
Name	46"	48"	50"	52"	54"	56"	58"	60"	
Toni	•	•	•	X•	•	XX•	X•	XXX	1st Place
Mary Ann	•	X•	•	X•	X•	XX•	XX•	XXX	2nd Place
Kiana	•	XX•	XX•	XXX					
Denise	X•	X•	XX•	X•	XX•	XXX			3rd Place

• = successful attempts
X = unsuccessful attempts

Native Games Test

Name _____

Date _____

Period _____

True/False

_____1. In the Butt Jump, breaking contact is legal.

_____2. If the hands meet during the Stick Jump, that person is the automatic winner.

_____3. The winner of the Butt Jump is the best of three tries.

_____4. The only portion of the body touching the floor in the Knee Walk is the knees.

_____5. The starting position for the Stick Pull is palms down.

_____6. The foot is locked behind the calf during the Owl Hop.

_____7. The starting grip of the Stick Pull goes to the person placed on the top of the bracket.

_____8. Girls may not do the Knuckle Hop with open hands.

_____9. The winner of the Stick Pull is best out of three tries.

_____10. The Knuckle Hop and Seal Hop are two different events.

_____11. Resting is not allowed between the forward and back jump during the Stick Jump.

_____12. The contestant is disqualified from the Knuckle Hop if he bends at the hips.

_____13. Chair Wrestling is an event at the Native Youth Olympics.

_____14. A person gets only one try in the Kneel Jump.

_____15. Hand position for Chair Wrestling is one palm up, the other down.

_____16. The starting position for the stick in the Toe Kick is 20 inches from the starting line.

_____17. For the Kneel Jump, you must land on both feet and maintain balance.

_____18. The foot cannot pivot in the One Leg Twist.

_____19. Contestants may start their approach from any distance in the One Foot High Kick.

_____20. The Leg Wrestling winner is determined by 3 out of 5 tries.

Multiple choice

_____1. The winner of the Elbow Walk is the person who

A. walks the longest time
B. walks the furthest distance
C. has the strongest elbows
D. has a low tolerance to pain

_____2. The winner of the Butt Jump is the person who

A. successfully pushes the opponent across a given line.
B. wins best out of three.
C. Both A and B.
D. none of these.

_____3. Jumps in the Stick Jump are

A. impossible
B. measured on a 3 inch scale
C. only a forward motion
D. measured on a 2 inch scale

_____4. For the Toe Jump, the distance is measured

A. to the heel
B. to the toe
C. in meters
D. in yards

_____5. The starting foot position for the Kneel Jump

A. is not important
B. is tucked under you, flat out
C. in on the starting line
D. is tucked under you, on your toes

_____6. The target for the one foot high kick

A. is square
B. must be 8 inches in diameter
C. is raised at 2 in increments at all times.
D. is raised at 1 in increments when there are only three contestants left

_____7. The starting position for Leg Wrestle includes

A. contestants' heads pointing in the same direction
B. hooked elbows and grasped wrists
C. both legs flat on the floor
D. stomaches down

_____8. If there is a tie in the 2 ft High Kick

A. both people are declared the winners.
B. the winner is the person with the fewest misses
C. they start over
D. they keep going until someone kicks higher

_____9. Movement for the Toe Kick

A. is similar to the Toe Jump
B. is to jump forward and move the stick forward.
C. is to jump backwards and move the stick backwards.
D. is to jump forwards and move the stick backwards.

_____10. In the Toe Kick

A. there is a big chance you will break a toe.
B. you get 3 tries at each distance
C. you may run and jump
D. the stick is 4 in in diameter

Matching

Match the action with the correct event listed below.

_____1. Using the butt, try to push the opponent over a given line.

_____2. Try to pull the opponent without jerking on the stick.

_____3. Hop on toes and knuckles simultaneously.

_____4. Walk on elbows for as long as you can.

_____5. Hop on one leg without straightening it, trying to gain the most distance.

_____6. Jump forward as far as you can without letting go to toes and maintaining balance.

_____7. Using upper body momentum to thrust yourself forward.

_____8. Jumping with both feet to kick the target with only part of 1 foot.

_____9. Contestant throws body over the leg held against wall without loosing contact with the wall.

_____10. Cause opponent to have his feet touch the floor or chair, or have him fall off the chair.

A. Toe Jump	B. Stick Pull
C. Chair Wrestle	D. Elbow Walk
E. Butt Jump	F. One Leg Twist
G. Knuckle Hop	H. One Foot High Kick
I. Owl Hop	J. Kneel Jump

Essay Question

(10 Points)

How and why do you think Native games evolved? Why are they important to us and important in today's P.E. classes?

Test Answers

True/False

1. **F**	6. **F**	11. **T**	16. **F**
2. **F**	7. **F**	12. **T**	17. **T**
3. **F**	8. **F**	13. **F**	18. **F**
4. **T**	9. **T**	14. **F**	19. **T**
5. **T**	10. **F**	15. **T**	20. **F**

Multiple choice

1. **B**	6. **D**		
2. **A**	7. **B**		
3. **D**	8. **B**		
4. **A**	9. **C**		
5. **B**	10. **B**		

Matching

1. **E**	6. **A**		
2. **B**	7. **J**		
3. **G**	8. **H**		
4. **D**	9. **F**		
5. **I**	10. **C**		

BIBLIOGRAPHY

Boyden, E. Douglas, and Roger G. Burton. *Staging Successful Tournaments.* Volleyball One Sales Co.,1979.

Eger, F. H. *Esktmo Inuit Games.* X-Press 2nd ed.
(This book has a useful bibliography and list of Media and Resources. It also lists a large variety of different games. The address is:
3905 W. Twelfth Av.,
Vancouver, B.C. Canada.
V 6 R 2P1)

Northstine, Greg, Luanne Pelagio, and David Thundereagle. *Native Youth Olympics Handbook.* Cook Inlet Native Association; Johnson O'Malley Program, 1983.

Roberts, Helen, Director of Curriculum and Evaluation. From a memorandum to Principals and Principal Teachers, Northwest Arctic School District, November 20, 1979

Using Manipulatives to Teach Math in a Village School

Helen Eckelman

Akiachak Elementary School
Yupiit School District

Introduction

"Helen, would like to teach algebra to your 2/3rd grade classes next year?" My first reaction to this question from my Superintendent, Brad Raphel, was, "Sir, you've been in the bush too long!"

I had just struggled through a year of teaching "regrouping and renaming" only to have my students bomb it entirely on the CTBS test and he was suggesting I try teaching algebra! After an hour or so I walked out of his office wondering when the real fun would begin. I was later to learn that his pet project, "Mortensen Math", would provide the teacher with the understanding and tools to reinforce often abstract mathematical concepts by making them concrete, visual and fun—yes, fun!

To fully understand how a first year teacher could possibly have an enjoyable year, much less a "fun" one, the reader must appreciate the history and origin of the Y.S.D. In 1985, with the help and guidance of some very powerful legislators who believed in the concept of local control, the three villages of Akiachak, Akiak, and Tuluksak, through popular vote became the fifty-fifth school district in the state. The residents and politicians were dedicated to providing the best possible educational programs for children, while maintaining and fostering the cultural heritage of the local people.

As I accepted my first teaching position I knew that the Y.S.D. was a new district being guided toward goals and educational values different from other established districts. We were undergoing a series of changes while searching for programs that would meet the needs of the Yupik student. These needs included recognizing the learning styles of the Yupik people, while respecting their environment, culture, and heritage. Superintendent Raphel was not afraid to try ideas ahead of current or popular trends, especially if they would work within the Yupik culture. His adaptation of "Mortensen Math," a program without textbooks, regular workbooks, or teachers' manuals, was a dramatic step that showed his

belief in teachers as "real teachers" instead of "presenters". His next challenge was to find those few creative and dedicated individuals who enjoyed the challenge this district would offer.

Mortensen Math is a learning theory. It is based upon the principle that understanding mathematical concepts is not beyond the grasp of any student. The purpose of the program is to help students find clarity and understanding by engaging them in three learning modalities: tactile, visual and auditory. Mortensen Math was chosen by the District because it addressed the needs of the Yupik students. A basal math program, though comfortable for teachers to use, lacks consideration for how the Yupik people traditionally learn. Predominant in the Yupik culture are tactile and visual learning modalities.

Unlike the basal program, Mortensen Math emphasizes active, not passive learning. Working with manipulatives, students gain a visual perception which holds their attention. Using this approach to solving mathematical problems enables them to "see" concepts such as calculus, algebra, basic math, fractions, and measurement. This is accomplished by providing students with sufficient time to work with manipulatives in order to follow a natural progression to more in-depth understanding of mathematics. The use of manipulatives creates a unifying element found throughout each strand. Manipulatives, like all the materials, are uniform in purpose and theory: BUILD A RECTANGLE? By using manipulatives, students develop perception skills, organizing skills, and functional skills, which become stored information. This enables them to learn and to retrieve previously learned skills.

The Mortensen Math program centers around the use of workbooks and manipulative kits in five different strands and subject areas. The subjects covered are arithmetic, problem solving, measurement, calculus and algebra.

Objective of the Program

To enable the student to visualize the physical form that represents a specific problem and to work mathematical problems on an abstract level using higher level thinking skills, reasoning and logic.

Goals of the Program

- To develop a good self-image by eliminating math anxiety.
- To assist students in gaining the attitude that math is achievable and fun.
- To develop logical thinking which is carried over to any field of study.
- To provide an easy-to-use, straight forward approach to teaching mathematical concepts which is responsive to individual differences and needs.

Why Use Mortensen Math?

Mortensen Math, developed by Jerry Mortensen and tested by educators in hundreds of schools throughout the country, has demonstrated that it can dramatically simplify the teaching and learning experience of mathematical concepts for children of all ages. Jerry Mortensen has spent considerable time presenting his program to educators around the country. As a mathematical-linguist, he has taught students age four and older for more than twenty years.

More than five years ago, Mortensen created a math program based on the use of manipulatives to teach abstract math concepts to students. Math manipulatives are hands-on objects which can be used to provide visual pictures of mathematical operations. Mortensen utilized multi-colored, multi-sensory blocks for counting and constructing various sized rectangles. His theory was to create a mathematically rich environment starting with the very young. His idea of starting with the young was to develop the concept of math being fun. When we look at the failure of memorization and heavy stress in our first grade, we can see where failure starts. Mortensen believes that a child comes to school to have fun and enjoy success.

The early years is the time to start the program in order to build confidence, success, and self esteem, all in a math environment. The child comes to school excited and eager to learn. He or she will approach even algebra ideas with a simple, "what's the question?" In the Mortensen Math program, students are not held back because of the grade level concept if they are ready to move on. Students are capable of learning math concepts if they have the right tools– Mortensen manipulatives and teachers who are trained in using these tools.

Even though many teachers get into a rut of doing "the next two pages in a workbook", everyone agrees that the manipulative approach is the best way to teach. Mortensen Math is revolutionary! It supports the right

brain theory of learning, and complements the Yupik students' learning style. The Yupiks, for the most part, are visual, tactile learners whose skills are enhanced through repetition, review and learning preferences, whether with a group or an individual setting. Textbooks and memorization do not work with our Yupik students. The average students cannot read the directions because of language barriers. Our students do not have a basic math foundation on which to build higher concepts. The textbooks move concepts too fast and with not enough repetition, and don't take into consideration the students' language barrier. With Mortensen we could develop our own language and learn along with students. It makes a dual combination learning team, instead of a presenter and student.

A strong point with the Mortensen program is individuality. If there is a student who is curious about a specific area you can introduce the concept through the manipulatives and allow him to work at his own leisure and speed. I had a second grader enthralled with fractions last year. I set him up with the fraction kit, and folder with workbooks for one level. Every time he earned free time, you'd see him over at the math center working with fractions. He progressed through all of level 1 before the end of school. Another student wanted to learn division and I set up the same procedure for him. It is my feeling that interest is important and when a student is ready he or she should always move ahead. Often this one interest will mushroom into the entire class wanting to learn that concept.

The Mortensen workbooks are used as a basic tool for our math curriculum. They are copied by sections and used to reinforce basic concepts. We have purchased many supplemental books for grades K-7 to utilize for drill sheets. It is important that the students can work math sheets. They need a constant flow of drill and practice to master concepts.

With a large enrollment, workbooks can be expensive. As an alternative, some teachers came up with the idea of using answer sheets as an alternative to marking in the workbooks. One teacher put the workbooks in files starting with level 1, book 1, with five books at each level. The student can pull the workbook and worksheet together. The teacher can fill in the answers in several of the books of every level and strand and put them on hooks so the students can check their finished work. The workbooks have also been used for enrichment for those students who were always looking for another challenge in math.

Teaching Algebra with Mortensen

Algebra enables the student to deal flexibly with mathematical ideas and concepts. With the Mortensen program we have been able to take certain "liberties" with language and notation to further our goals of concept and simplicity. For example, with beginning algebra, we describe dimensions as "over" and "up" instead of "length" and "width". The standard notation style was changed from horizontal to vertical to prepare the student for further work. Another reason for teaching algebra is the belief that first year algebra can't be learned in a single year.

The average Japanese seventh grader scores at a level higher than 95 percent of United States eight graders. How is this done? While we dally in the first three grades doing no more than addition, subtraction, and multiplication of whole numbers, the Japanese are gaining mastery of far more arithmetic. The Soviets begin algebra study in their grade 2 (our grade 3) by asking students to find the value of a+b when a=1, b=5, a=3, b=4 and so on. I observed Joyce Lund at Tanaina Elementary using this approach while teaching number families in class. The second graders understood exactly what she meant when she wrote a+b=c, b+a=c. She was teaching her students the language of algebra. "There is a certain notion in the U.S. that certain algebraic ideas should be introduced in the early grades. If we had the luxury of time—it would make no difference where we introduced algebra, but time is our biggest enemy. "

It is often said that algebra is a foreign language. A new vocabulary must be learned, and expressions, sentences, and a rigid grammar are encountered. Even if Algebra is not a foreign language, it has much in common with foreign languages. It is universally known that learning a foreign language is easier when you are younger. Wherever commonalities exist between foreign language and algebra, it would seem that the younger students have the advantage.

I like the children to see algebra as another math term, not paranoia. I use algebra mostly for transfer. The manipulatives blend into that area easily. The students are not intimidated with what they are doing. Algebra is just another word to them. They are receptive to facts that they don't understand at this age. If I tell them "this is an X bar", and explain and show why, it's an X bar. I have been amazed at their versatility when I ask them to identify the blue bar; they'll look closely, feel and then answer.

The students have no problem transferring from Base Ten to Algebra and X bars. During my teaching observation session I have presented an identification lesson on algebra and handed out the arithmetic workbook, which was the same level and concept as Base Ten not Algebra. Every student in the class correctly completed his assignment and handed it in without comment. Imagine my shock when I graded them that evening to find out I had handed out the wrong workbook! It proved the continuity of the program to flow one into another. There are no isolated concepts in Mortensen. They all revert to reducing the world of mathematics to mere counting.

The students really enjoy algebra. I usually use it as an end of the year activity when attendance is poor and attention spans are waning. It ends the year on a fun and positive note. I have never had one returning student who couldn't identify the pieces at the beginning of the next school term when I start to introduce the manipulatives. I usually say "And when we turn the manipulatives over we're working with algebra; can anyone remember the difference?" I feel the visual and concrete image is a direct connection to their long term memory. One district teacher at Akiak has had an amazing success with Mortensen in algebra. Her students have all gone into high school with a good understanding of algebraic equations and factoring. "Building a rectangle makes algebra so simple and easy to understand; all my students love it", their teacher once told me.

Using Mortensen Kits

Mortensen offers a wide variety of kits to create a math rich environment. The N'Stuff manipulatives contain materials one through ten that are color coded to the Mortensen Math program. They help students visualize each fact, understand "more than", "less than", and how to count and identify numbers. Also the manipulatives are color coded to number value. This creates a fun way for children to learn counting, matching, adding, subtracting and other mathematical relationships. They are to be used for each child or two children for individual hands-on practice. The first grade can use them for basic counting, number value and adding and subtracting of facts less than ten.

I have seen one teacher teach story problems using the N' Stuff kit. She had the children on the floor in a circle, where she could recite a story problem and the students would build the answer. This way they could take the auditory command and build the answer hands-on. She worked with a group of six students. I noticed the students watched their kits while they listened to her instructions. As soon as the number was said their little fingers were automatically reaching for the bar.

I have asked our District to write a grant that would enable the school to check out these kits for students to take home and show their parents. They would benefit from the "teaching" experience as well as enforce their learning. I am going to present the N'Stuff kits at the next Head Start meeting along with the Number Discovery kit for math readiness skills. There are several students who didn't make the age cut-off for

Kindergarten this year and they are bored. I have offered to volunteer and demonstrate the use of the kits as well as loan kits from my classroom until they can purchase their own. This will enable these students to enter Kindergarten with their number facts well in place. The Number Discovery is designed for ages three and up with puzzle fun in mind. There are skip counting rhymes, games, graph sheets, drill sheets and many activities that can be utilized with this kit.

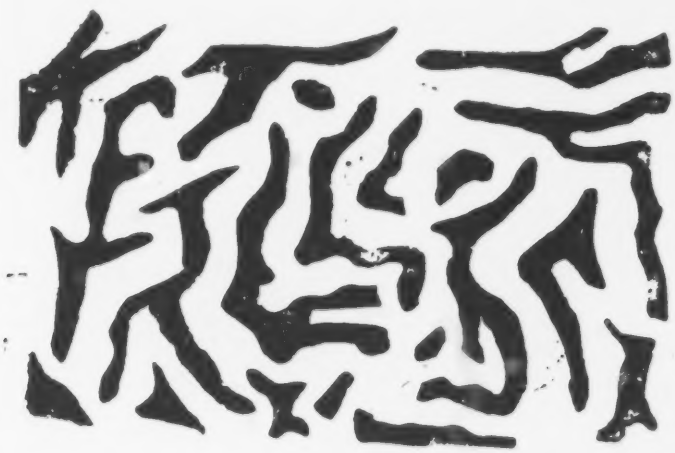
One of the kits I use most frequently is the Addition and Subtraction kit. Included in the kit are fact cards for building, color coded manipulates prove your answer trays, and self checking. These kits are designed to teach students the basic addition and subtraction facts visually. They will internalize the concepts of regrouping and reshaping to make memorization of the facts a fun game. The flash cards have the answers on the reverse for self checking. This kit will teach the child that addition and subtraction facts are visualized through building. Number value can be expressed several ways. As I watched one first grade class build six, I observed one of the students suggest that ten take away four was six. This was a real surprise to the rest of the class. This was the first time anyone had used subtraction to build a number. This generated a flurry of excitement as others tried to build six with subtraction. In the excitement others tried to build six with subtraction. As the excitement grew I observed students build addition problems less than ten by comparing to the number of equal length or sameness. The teacher then demonstrated how a student could build problems greater than ten by comparing to the length of ten or more for sameness. Subtraction problems can be built by turning over the manipulative of the number being "taken away" and replacing it under the amount you originally had. Then you fill in the difference with the number that corresponds to the missing length of sameness.

I use addition kits in my room everyday. They visually enforce the number facts before the student. It is important that they record what they have found and prove their answer. Proving out rounds the process, to record, and takes the abstract and makes it concrete. This has been the first time I've seen students able to do facts up to twenty in their heads without using their fingers for backups. I test this knowledge with a drill called, "Mad Minute Math" where they must recall a certain number of the facts quickly in one minute. The number they have correct in that time frame is charted on a wall chart and they daily compete with themselves to better their score. Students monitor themselves. If they need help, they'll go and get the kits themselves and work. They like having manipulatives in trays. They are easier to see, handle and they don't have to worry about them falling out of bags.

The Extra Baggie Manipulative is super for classroom use. This ziplock of manipulatives can be an individual student's set or extra pieces from the classroom combo sets. It is great for borrowing, carrying, multiplying and dividing. It is also used for algebra. It works exceptionally well for two students as a maximum hands-on. Many classrooms grades 2-5 have purchased these to use as classroom sets for basic manipulative use.

It is great when playing the HTO game that teaches place value through hundreds. You just turn the bars over to teach algebra concepts. I saw these used effectively in schools where manipulatives had to be shared between classrooms. It is perhaps the cheapest and easiest way to get started with the Mortensen program.

My favorite of all is the multiplicaton facts kit. With this kit multiplication facts are learned visually, not abstractly. Memorization can be fun when you can "see a picture" of your facts. This kit enables the student to understand and internalize the concepts of counting and skip counting which will automatically lead to the mastering of the multiplication facts. The kit is designed so very little help or instruction is needed because a control of error is built in. The manipulatives are all color coded. There are skip counting cards and multiplication fact cards. There is a proving facts tray at the bottom for the student to prove his answer, which is another visual enforcer. This kit will allow practice as a prerequisite to multiplication, whisper and skip counting. Games can be played individually or with the whole class. Any child who can count to nine can begin to build beginning division facts, as well as basic addition and subtraction facts, by providing the child with a visual picture of facts, rather than an abstraction. "These kits have become so popular that some schools have bought several sets of them and move them from class to class during the day."



I use the multiplication kit a lot because of the stress on multiplication in the 2/3rd grade in curriculum. The district believes it is the foundation on which to build all later math facts. I find the kits invaluable. I taught more in two months with the kit than I did in a nine month period with just drill sheets and memorization and using multiplication with manipulatives. The students will automatically pair off to use the manipulatives. They are staring to break the habit of counting on their fin-

gers. I noticed the break-through in multiplication when a student asked me if 2 X 3 meant 2 of the 3 bars. Another student asked me why she couldn't pull 3 of the 2 bars. When I tell them to go ahead and check their answer and we find we have been introduced to the commutative property of multiplication of whole numbers. Naturally, this is the introduction of a "big" word, which they love! When a student discovers what the sets of numbers represents and that they can count and figure it out themselves, their eyes light up and they are on their way to the discovery and joy of learning to multiply. While using the manipulatives the students will automatically run their fingers over the manipulatives and subconsciously implant the feel of the bars, as they work their problems.

While the children liked to do whisper counting and skip counting, I found this verbal skill was not transferring over onto the paper. It was like learning a song and not understanding the words. I needed to make it concrete as well. I took folders and wrote the skip counting numbers on one side—then held up each folder while we counted and played various games. On the back of the folder, I put the times table that went with the number and the next round would ask "what times what" makes this number. The next step was to take that number, e.g. 2 X 5 = 10 and write 5 + 5 = 10. This made the abstract concrete and helped them memorize their facts.

The students need to record what they're doing. Sometimes I'll stop in the middle of a drill and have them write their answer and the problem on paper and hold it up when finished. Now I can see why teachers of yester year made you write your times tables every day. Recording is a key element in using Mortensen manipulatives.

The other outstanding kit I've had huge success with is the Fraction Kit. Students learn to identify, find equivalents, reduce, add, subtract, multiply and divide fractions using the special color-coded manipulatives. This kit consists of whole units, fractional strips and clear overlays. With this kit the student will be able to understand value, numerator, denominator and whole numbers. They will be able to show equivalent fractions several ways. Our high school math teacher uses the kit to introduce fractions to his class whenever the students come to a problem they cannot figure out; they pull the manipulatives and work it out. I saw a fraction kit made out of plexiglass in one room. The kit was made larger to make it easier to see and work with on the board. Many of the classes have magnet key boards, but others don't. In some classes the teachers use cookie sheets to put the manipulatives on so magnets will hold.

The kits are multi-functional. The multiplication, Combo, Duo, and Half tray are all suitable for all four operations (algebra, arithmetic, fractions, calculus). The Basic Operations Kit is designed for work with bigger problems. Problems can be solved in all four operations, as well as square roots, decimals, percentages and algebraic work up to the fourth power. There are visual aid cards for concepts of multiplication, division, square root, fractions and relationships. You can get fraction

command cards sets to help reinforce fractions. And the list continues like a wish book.

While the initial cost of the program is high, the Mortensen kits are durable and, with proper housekeeping, will last for many years. Teachers would need to talk with their Mortensen consultant to find the materials which best fit their student's needs, district curriculum and, most important, their school budget.

Training Teachers

"In my opinion, teachers know manipulatives are important and order all kinds of things from catalogs. The problem is, they don't know how to use them".

Our district has three site in-services for teachers, principals, and aides. For the program to be fully implemented, you must have your aides trained in the use of manipulatives. In our district where the language barrier plays such a part in learning, the concepts are often explained in Yupik to the students. It is a real source of support and strength to have principals fluent in the program. This gives the teachers a support base, a resource person on site and a willing ear when you run into difficulties. To see a principal go into a classroom and work with the manipulatives is impressive to students.

Districts should not be upset when teachers ask for repeated in-services with manipulatives. In fact, there should be a stipulation that teachers receive a certain number of training hours with college credit, spaced at intervals when new concepts will be introduced. Staggered in-services throughout the year give teachers a chance to talk out problems, recognize weak areas and discuss problems in teaching various concepts.

At first, it is common to feel overwhelmed by the new language, as well as awkward in the use of the manipulatives. Teachers benefit from material updates, new ideas, and a sharing of new and different ways to use the manipulatives. Often, when I read my old notes over again, I'll come upon an idea that I had jotted down and forgotten to use. We all need refresher courses.

The monthly newsletter Yates Math Bits is an excellent way to keep abreast of the latest ideas. It is filled with teacher suggestions, new games, and activities. The list appears endless as teachers continue to experiment and work with manipulatives. Even though Mortensen Math is Jerry Mortensen's brainchild, it is the teachers using the program who will mold and tailor it to meet their students' needs. Through innovative and creative uses of games and shared activities, they explore and discover the program along with their students.

Mortensen Math and Special Needs Programs

Mortensen Math is designed for use in both a regular classroom and special needs program. It meets the needs of both special education and gifted/talented students. Gifted/talented students have unlimited oppor-

tunities for exploration and expansion in areas of interest. Special services students are given concrete examples to work with, to touch and build upon so the answer forms right before their eyes.

In the Yupiit School District, our special services staff uses manipulatives in multiplication and reinforces them with an Apple computer program designed to help with multiplication concepts. They use manipulatives in all their math and find the students always willing and eager to do math.

Mortensen Math Consultants

The Mortensen Math Program is strengthened in the State of Alaska by having two excellent math consultants. They are Jerry and Judy Yates. Jerry is a retired teacher and principal and Judy has taught every class from first to eighth including Gifted and Talented. They bring with them twenty years of experience in the educational profession and a sincere desire to help students and teachers. They can take your Math basal and go through it helping and suggesting the different concepts that can be taught with the manipulatives. They can and will help you develop your classroom teaching skills and work with you in the classroom until you feel comfortable. Having them in the State means you get ordered materials in less than a week, where before it could take months to arrive. They publish a monthly newsletter to keep teachers in touch with each other concerning the Mortensen Program and share the ideas that they pick up when they talk, visit and present in different classrooms around the State. There are always new games, activities and uses for the manipulatives suggested in the newsletter. They also provide a packet with their presentations that explains the language and use of the kits they present. This is great help when you need to review. These two dedicated professionals have earned the respect of all who have worked with and for them. They know the Mortensen Math Program and will tell you in a minute, "it works!"

Conclusion

I personally know Mortensen works! I watched my students take off in multiplication facts and the basic facts. Over 80% of my class tested 100% competency last spring on CTBS tests. I observed their faces during testing and in the difficult part of application and computation I observed honest efforts to do the problems. I saw them listening, and using critical thinking skills not slamming down their pencils and telling me, "it's too hard". I've seen the gains in Kenai, Mat-Su and our district and I'm convinced that Mortensen Math will revolutionize classroom mathematics. I have no doubts that children do learn by using manipulatives, that require auditory, visual and tactile instructional approaches.

Mortensen Math works because:

1. The learning unit is small.
2. The equipment and materials are kept at a minimum.
3. Productivity is kept at a high level.
4. The learning unit is flexible.
5. The process is results oriented.
6. The process strives for little increments.
7. The program is individualized.
8. The support is continual.
9. The emphasis is on concept comprehension.

A page of abstractions, no matter how carefully designed or simplified, cannot involve the students' senses the way real material can. Symbols are not concrete. They're only a representation of the concept. Abstractions describe something that is not visible to the learner. Real materials, such as Mortensen Math can be manipulated to illustrate the concepts concretely and can be experienced visually by the student.

Nevertheless, skilled teachers are the key. The Mortensen program enables their enthusiasm, knowledge and success to be mirrored in their students' lives.

Artists' Credits

Page	*Artist*	*School*
Cover	Tony Peele	Hydaburg City School
2	Christopher Holmberg	Sand Point School
6	Hilda Swan	McQueen School, Kivalina
8	Sophie Gundersen	Sand Point School
15	Loren Gundersen	Sand Point School
19	Joseph Young	Hydaburg City School
24	Vince Osterback	Sand Point School
29	Dee Dushkin	Sand Point School
33	Kerry Malone	Marie Drake, Juneau
37	Tony Peele	Hydaburg City School
41	Lynnette Mack	Sand Point School
45	Teresa Willard	Sand Point School
48	Albert Bjornstad	Sand Point School
50	Robert Pedersen	Juneau Douglas High School
52	Oliver Vergus	Sand Point School
68	Ben Williams	Marie Drake, Juneau
71	Annie Sege	McQueen School, Kivalina
74	Leslie Cabot	Sand Point School
78	Bruce Beyer	Sand Point School

END

U.S. Dept. of Education

Office of Education
Research and
Improvement (OERI)

ERIC

Date Filmed

March 29, 1991